DOCUMENT RESUME

ED 426 052 SP 038 254

AUTHOR Levine, Marsha, Ed.
TITLE Designing Standards That Work for Professional Development Schools. Commissioned Papers of the NCATE PDS Standards Project.
INSTITUTION National Council for Accreditation of Teacher Education, Washington, DC.
ISBN ISBN-0-9665687-2-9
PUB DATE 1998-00-00
NOTE 213p.
AVAILABLE FROM National Council for Accreditation of Teacher Education, 2010 Massachusetts Avenue, NW, Suite 500, Washington, DC 20036-1023; phone: 202-466-7496; e-mail: ncate@ncate.org; Web site: www.ncate.org; ($26).
PUB TYPE Collected Works - General (020)
EDRS PRICE MF01/PC09 Plus Postage.
DESCRIPTORS *College School Cooperation; *Educational Quality; Elementary Secondary Education; Higher Education; *National Standards; National Teacher Certification; Partnerships in Education; Preservice Teacher Education; *Professional Development Schools
IDENTIFIERS *National Council for Accreditation of Teacher Educ

ABSTRACT

This book presents seven papers that focus on the design of standards for Professional Development Schools (PDSs), highlighting the National Council for the Accreditation of Teacher Education (NCATE) Professional Development School Standards Project. The first paper, "Designing Standards That Work for Professional Development Schools" (Marsha Levine), introduces the topic. The second paper, "Worthy of the Name: Standards for the Professional Development School" (Gary Sykes), examines arguments for and against developing standards for PDSs. The third paper, "Professional Development Schools: A Literature Review" (Lee Teitel), analyzes the state of the art on the subject. The fourth paper, "The NCATE Professional Development School Study: A Survey of 28 PDS Sites" (Roberta Trachtman), presents the results of a survey conducted among PDS sites nationwide. The fifth paper, "From Here: A Synthesis of the Chicago Discussions on PDS Standards" (Donald Freeman), captures the subtleties of these conversations by representatives from each survey site. The sixth paper, "Accreditation Standards and School Improvement: Putting Methodology in its Proper Place" (Thomas A. Wilson), explores the relationship between PDS standards and design of an assessment program that would achieve standards for identifying and supporting quality in PDSs. The seventh paper, "Finance and Policy Structures That Support the Sustenance of Professional Development Schools" (Jon Snyder), presents four case studies. An appendix presents draft standards for Professional Development Schools. (SM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 426 052

PDS Standards Project

Designing Standards That Work

for Professional Development Schools

Commissioned Papers of the NCATE PDS Standards Project

Marsha Levine, Editor

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

L. Gubser

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

SP038254

National Council for Accreditation of Teacher Education

BEST COPY AVAILABLE

Designing Standards That Work
for Professional Development Schools

Marsha Levine
Editor

National Council for Accreditation of Teacher Education

Published by the National Council for Accreditation of Teacher Education, 2010 Massachusetts Avenue, NW, Suite 500, Washington, DC, 20036-1023

Copyright © 1998 by the National Council for Accreditation of Teacher Education. All rights reserved.

The views expressed in this book are those of the authors, and do not necessarily reflect the views of NCATE.

ISBN 0-9665687-2-9

Contents

Acknowledgments vii

Designing Standards That Work for Professional Development Schools
Marsha Levine 1

Worthy of the Name: Standards for the Professional Development School
Gary Sykes 11

Professional Development Schools: A Literature Review
Lee Teitel 33

The NCATE Professional Development School Study:
A Survey of 28 PDS Sites
Roberta Trachtman 81

From Here: A Synthesis of the Chicago Discussions on PDS Standards
Donald Freeman 111

Accreditation Standards and School Improvement:
Putting Methodology in its Proper Place
Thomas A. Wilson 131

Finance and Policy Structures That Support the Sustenance
of Professional Development Schools
Jon Snyder 155

About the Contributors 191

Appendix: Draft Standards for Professional Development Schools 193

Acknowledgments

The contents of this volume reflect work done over two years in the Professional Development Schools Standards Project at NCATE. We are grateful to the AT&T Foundation for a generous grant that supported this effort.

I would like to acknowledge all of the individuals who volunteered their time to serve on Advisory Groups and Working Committees, whose professional judgment informed us. Most importantly, I would like to thank the participants in professional development schools all over the country who have directly contributed to the design and development of the draft PDS Standards. They offered their expertise and time to tell us what was most important about professional development schools—in writing and in person—and responded to our many questions and numerous requests for feedback. The authors in this volume made a special contribution. They brought us their expertise in different areas and were able to develop ideas that grew out of our deliberations and bring fresh insights to them.

Finally, I would like to thank Lisa Christie, Gina Downin, and Eleanor Cushman, each of whom worked on the project at different times. Their assistance was highly valued and their participation made the work a pleasure.

Marsha Levine, Director
PDS Standards Project
Fall, 1998

Designing Standards That Work
for Professional Development Schools

Marsha Levine

Professional development schools are institutions created through partnerships among universities, schools, and other organizations including school districts and teacher organizations. They are intended to improve teacher preparation and professional development, and to promote inquiry through collaboration of the partnering institutions in the context of a school. Although they are a complex social invention, PDSs are real schools in which reality is constantly addressed and examined, and attempts at organizational improvement and enhanced learning are supported. Conceptually, PDSs are analogous to teaching hospitals in their functions and high leverage position: each has professional preparation and research as its mission; each views this mission in the context of providing quality service to their respective clients; and each sits at the intersection of theory and practice. Similar to teaching hospitals, PDSs seek to bring the best available knowledge and the best practice to those they serve.

Introduction

The National Council for the Accreditation of Teacher Education (NCATE) is a coalition of over thirty education organizations concerned with the quality of teacher education. NCATE is the national professional organization recognized by the U.S. Department of Education to grant professional accreditation to institutions preparing teachers. In 1995, NCATE initiated the Professional Development School (PDS) Standards Project. Supported by funding from the AT&T Foundation, the PDS Standards Project had three goals:

- to establish a consensus about quality and good practice in PDSs;
- to design standards that reflect the fact that the PDS is still evolving as a new institution; and
- to use standards as part of the development of an infrastructure to support and sustain PDSs.

The project carried out a set of activities designed to help us achieve these goals. In June of 1995 we established a National Advisory Group composed of representatives of the constituencies of professional development schools—teacher educators, teachers, administrators, national, state and local policy makers, teacher unions, and education researchers with special knowledge about teacher education and teacher learning. Out of this large group we formed several smaller working groups to guide the work of the Project. These groups were organized around research, policy and finance issues related to PDSs, and the drafting of the standards. Several consultants were engaged over the life of the Project and a number of professionals donated their time on advisory and working groups.

NCATE recognizes professional development schools as one of *the* major innovations in teacher education and school reform. Because PDSs link these two education sectors they are potentially very powerful institutions for professionalizing teaching. Additionally, many NCATE-accredited institutions have made significant commitments to developing PDSs and incorporating them into their teacher education programs. While existing NCATE standards address clinical settings and partnerships with school districts, they do not directly deal with the scope or characteristics of professional development schools.

Although the Project was not charged with developing PDS standards that would become a part of NCATE unit accreditation in the foreseeable future, it was assumed that draft PDS standards would be presented eventually to the NCATE Standards Committee to consider how they *might* be used. The Project Director worked closely with NCATE staff and NCATE boards, particularly the Unit Accreditation Board Standards Committee. Two possible uses of the PDS standards were discussed early on: they might become an alternative for institutions undergoing NCATE accreditation; and they might be examined for their implications for all clinical experiences, as a part of an ongoing revision of unit accreditation standards.

The contents of this volume are commissioned papers and studies done in support of the Project. They represent, however, more than the collected works of the Project. They reflect an intellectual odyssey, through which the staff, consultants, advisors, and participants in the Project searched for an appropriate way to develop and use standards to advance and support the creation of professional development schools. Some of the papers identify challenges for the standards development process. Others contributed to the knowledge base upon which the PDS standards were designed. Together they reflect the journey we have taken as a group of professional colleagues—all stakeholders in the quality of education in America's schools.

The Challenge

It was clear from the very beginning that designing PDS standards would not only be challenging but also somewhat controversial. There are several interested communities. Advocates for PDSs have grown up within the major sectors that are involved—teacher educators, P-12 school reformers, teacher union leaders, and school district policy makers and administrators. However, little unanimity exists, either within each of these groups or among them, about many issues with respect to PDSs. This disagreement extends to such fundamental questions as "What is a PDS?" and "What are its distinguishing characteristics?" Each group sees in the PDS a different promise. Some teacher educators view PDSs as a critical component of the professionalization of teacher preparation with strong emphasis on content, professional, and clinical preparation; others are threatened by the major changes inherent in making a commitment to PDSs. School reformers look to PDSs as the places where new teachers will learn the skills, dispositions, and orientation to practice associated with school reform, and they see PDSs as models or exemplars of schools that support such professional practice. Some school district leaders view PDSs as good front-end investments because they prepare new teachers to be successful, reduce teacher turnover, improve teacher retention and reduce professional development costs; others don't yet connect their district's needs with the potential of the PDS. Some teacher

union leaders support PDSs for the same reasons some district leaders do—and they see their members taking on professional teacher leadership roles as PDS school-based faculty. But the strongest advocates of PDSs are the university and school faculty who are doing the front line work with teacher candidates, new teachers, and their peers. They often say, "This is the best work I have ever done!" Too often, however, they are doing the work under less than supportive conditions.

While support for PDSs has grown over the last several years, it had become clear by 1995 that the PDS "movement" was in some danger. Viewed as an important innovation, PDSs had proliferated rapidly, with little attention to definition and quality. Under such circumstances, there was concern that PDSs could rapidly become an empty promise and a lost opportunity. The horizon of education reform is littered with such unfulfilled promises. Further, as interest from national, state, and local policy makers increased it became clear that definition and a way to identify quality were imperative. Policy makers began to ask, "How do you know a PDS is better than what you have always done? What are the outcomes?"

The PDS Standards Project was a response to these needs. We believed that institutional standards would help support and sustain the PDS. However, we were concerned at the same time that the approach taken be carefully constructed, given the fragile and complex nature of the institution. Three characteristics presented the greatest challenge. First, PDSs are collaborative institutions. The partners are from different sectors of the education community, each with its own history, culture, and governance structure. Each sector is traditionally very resistant to change, while PDSs require change in each of them. Second, every partnership is somewhat unique to its locality. Could we design standards that would help further PDS development, yet not attempt to standardize PDSs? And finally, PDSs are at varying stages of development. Could we design standards that would help the partnerships move from one stage to the next?

One additional factor shaped our direction. We were aware of working in the general context of standards-based reform. We were thinking about how to support major change in teacher education and in schools, simultaneously, through standards. We were mindful of the challenges that abound in a standards-based approach to education reform. Few argue with the general notion that standards are a good idea. The problem is how to make standards powerful—how to construct an assessment process that has an important impact. What process should be used to develop them? What should they look like? How should they be used?

The remainder of this chapter introduces the commissioned works that form this volume. The studies and analyses that follow made major contributions to the deliberations of the working groups and ultimately to how the draft PDS standards were developed, what the standards are about, and how we envision them being used.

Designing an Approach to PDS Standards and Assessments

In his paper *Worthy of the Name: Standards for the Professional Development School* Gary Sykes lays out the arguments both in favor of and against the development of standards for PDSs. He makes the case for taking on the challenge to develop institutional standards that could be used as a tool for institution building. Sykes reminds the reader that standards by themselves typically do not change anything. He argues that in order to create standards that could be used as instruments or tools for

reform we would have to identify what was truly important in PDSs and what characteristics were associated with their development. The standards would have to be based upon actual practice—they would have to be authentic. Additionally, we would have to devise a way in which the standards could be used to not only identify quality but also support development. Several specific observations made by Sykes speak to finding a way to accommodate standards, and the way we use them, to the needs of a developing, changing, complex institution.

Sykes develops the notion of developmental standards and a developmental process for generating them. He maintains that the process for creating standards should engage a range of participants in cycles of formulation, test, and revision. The standards themselves should undergo regular revision and refinement. The process for using the standards should empower partnership sites to continue to improve, and the standards should account for the stages of development of PDSs. Sykes addresses the question of sources for PDS standards pointing toward the use of exemplary practices, research, and professional consensus. The question of scope is dealt with in the context of a discussion of the complexity of a PDS and the integration of the four parts of its mission. Equally complicated is the question of identifying the unit to which standards apply. Schools, colleges of education, school districts, and often subunits within schools such as departments or teaching teams all must be considered. Each entity is itself subject to standards and the interplay among them creates a complicated environment for standards-setting for PDSs. Sykes considers the type of standards that might be useful, noting that inputs, process, and outcomes are all relevant. In this very useful analysis the author also considers the question of content: What should PDS standards be about? He points the reader in the direction of threshold conditions, mission and goals, quality assurance processes, and the nature of a learning community. Sykes closes with a discussion on stakes for standard setting and makes some recommendations for how to deal with the dilemma of motivating institutions to participate in a voluntary standards process. In many ways, the Sykes paper became a template for work that followed over the next two years.

Lee Teitel's *Professional Development Schools: A Literature Review* analyzes the state of the art in the world of professional development schools. His findings confirmed the generally held view that there was little agreement on the definition of a PDS. The term "PDS" was being applied to an enormous range of activity, which extended from traditional student teaching but in cohort placements, to wholly restructured teacher education programs developed in full collaboration with schools and other partners. Much of the existing literature was descriptive, including a growing number of case studies. Out of this descriptive material, however, we could identify a general agreement regarding the four functions of a professional development school: teacher education, professional development, enhanced student learning, and inquiry directed at the improvement of practice. Little evaluation or research on outcomes related to PDSs could be found. Teitel's work helped reinforce our concern regarding the vulnerability of this new institution and also contributed to the identification of some consensus regarding purpose.

Moving forward from the literature we decided to look closely at PDS practices in the field. Roberta Trachtman's *The NCATE Professional Development School Study: A Survey of 28 Sites* presents the results of an intensive survey conducted among PDS sites nationwide. Survey analysis produced a useful set of findings about

what is actually happening within these partnerships. Additionally, the analysis revealed challenges that PDSs confront, as well as challenges for the standards development process.

The goal for the survey was to identify some consensus on both purposes and practices in professional development schools. In our effort to design authentic standards we needed to identify what sites were doing and what they believed to be good practice. Using responses from a set of 28 PDSs, nominated by their peers, Trachtman was able to assemble a picture of emerging practices. This picture included a shared vision of learning among the sites that was constructive, contextual, and oriented toward higher levels of thinking. There was more than a hint of an integration of the functions of the PDS, with the exception of the inquiry piece—very few sites were doing anything they could describe as inquiry. Respondents wrote about using non-traditional assessment practices and teaching for understanding. Trachtman reported that PDSs serve all kinds of students and exist in different contexts; standards would have to accommodate those different contexts. Most of the responses revealed a lack of critical mass in their endeavors, suggesting strongly the need for more institutional commitment.

A lack of parity between university and school was also revealed. University faculty, for example, were not thought of as "learners" in the PDS. This finding suggested that standards would have to address the issue of partnership directly or the lack of parity would remain a barrier to fulfilling one of the goals of professional development schools—simultaneous renewal. The findings also clarified the nature of development within a PDS and began to show three stages in PDS evolution—pre-threshold, threshold, and quality attainment.

Overall, the picture which emerged from the survey was of an extremely vulnerable, young institution. Values, beliefs, and goals were articulated but often there were few examples of ways in which these were being enacted. There was a need for safety and buffers for participants. One other observation was important. There appeared to be a shocking lack of knowledge among PDSs about each other (not a very supportive context for growing a new institution).

These findings suggested direction for both the content and structure of the standards. They pointed toward a structure that would emphasize the integration of the functions of a PDS rather than developing standards around each function separately. They also highlighted the need to identify concrete practices that are associated with the commitments and beliefs so clearly identified.

The survey findings were the subject of extended discussion at a highly interactive conference held in February 1996. Two representatives from each survey site were joined by other PDS participants and advisors and consultants to the project for a day and a half meeting. In *From Here: A Synthesis of the Chicago Discussions on PDS Standards* Donald Freeman captured the subtleties of those conversations and further developed ideas undergirding the Project. His analysis deepened our understanding of the PDS in terms of roles and relationships, structural issues, core values and processes, and purposes for standards. Freeman specifically avoided using the four functions of a PDS (student learning, professional development, teacher education, and inquiry) as his rubric for analysis. Although the discussion groups were organized that way, he identified common threads that tie the four functions together. These four threads constitute what Freeman calls the "deep structures" of the PDS terrain: (1) roles and relationships; (2) time, results, and rewards; (3) evolution,

acknowledgment and gate-keeping; and (4) core values and processes. Each of the threads are presented and examined in his paper for their implications for standards-setting. This analysis is rich in its understanding of the tensions and complexities that underlie PDS work. It furthered our commitment to finding ways in which the standards would respond to specific needs of the developing institution, reinforce the integration of function, and support stages of development.

Freeman made another important observation. The conversation format of the conference revealed that people often held different meanings or uses for the same terms. What one person meant by "school-based faculty" was not necessarily what someone else meant. The differences and conflicts in language revealed underlying unresolved questions and the difficulty of trying to name new practices with old terms. As Freeman observed, this is characteristic of any emerging community, but it is problematic; common language does enhance the construction of shared meaning. This suggested another very important role and responsibility for the standards development process—the careful use of language to reinforce common meaning.

One outcome of the Chicago conference was a heightened interest in the relationships between how standards are developed and how they are used. This led to a meeting in the spring of 1996 at which the Standards Working Group heard presentations about several alternative approaches to institutional assessment, both inside education and in the business sector. These included presentations and discussion about the Baldrige Awards, teaching hospital accreditation, the School Quality Review process used in Maine, and the British School Inspection process. Following that meeting Thomas A. Wilson developed *Accreditation Standards and School Improvement: Putting Methodology in Its Proper Place*. The paper explores the relationship between PDS standards and the design of an assessment process that would achieve our goal—standards to identify and support quality in professional development schools.

Wilson is an expert on the British School Inspection Model and has worked with state departments of education and accreditation groups to design alternative approaches to institutional assessment. His paper furthers our understanding of standards as an instrument for change by asking whether the purpose and process of accreditation can be reconstructed to more directly support efforts to improve the quality of teaching and learning in schools. Wilson's task was to grapple with the question of how to strengthen the design of the process through which schools are known and judged. He challenges traditional notions about what is 'good information' about schools. He draws a contrast between what traditionally has been valued as good information—that which is objective, valid, reliable, precise, and controlled—and what is useful for improving teaching and learning. For example, looking at test scores may be objective but, Wilson argues, it will not tell you about why they are what they are and, therefore, how they could be improved; for that you must look at what teachers and learners are actually doing. Herein lies the dilemma for creating standards that can be used both to monitor institutions and to support them—monitoring demands objective information, while support requires more subjective, particular, and contextual information.

Wilson describes the English School Inspection process that manages to both monitor and support school quality. He contrasts this model with traditional U.S. accreditation on several issues—purpose, how information is collected, how judgments are made, how what is learned makes a difference to the school, and how standards are used. Wilson's critical point is the relationship between purpose, setting

standards, the characteristics of the institution, and the methods for knowing about a school's performance. Too often, we wind up setting standards for what we know we can measure in traditionally acceptable ways. For the PDS project, one implication was that we should consider methodologies appropriate to the institutional characteristics of PDSs to inform the standards setting process.

The final paper in this volume, *Finance and Policy Conditions That Grow and Sustain PDSs: Four Case Studies*, was written by Jon Snyder. In the initial goal statement of the Project, we indicated that we would address the question of finance and policy support for PDSs. We decided to look at several successful PDS sites to see how they actually supported the work that was being done. Using a reputational sampling, Snyder selected four PDS partnerships: University of Connecticut, University of Cincinnati, Montclair State University, and the University of Louisville—each with their partners. He conducted on-site interviews and visits and examined documents, evaluations, and reports to answer the basic question, "How do you make it work?"

Snyder's major finding is that these successful, mature sites make the PDS work by depending upon three sets of resources: school-based educators, university-based educators, and prospective educators (interns or student teachers). Furthermore, these resources are blended to support teaching and learning, to the benefit of adults and children. Viewing prospective educators as a resource is critical. It also represents a clear departure from the traditional orientation toward teacher candidates. This view of teacher candidates appears to be a significant part of what makes a PDS unique and what makes it work. These three resources are clustered in terms of placement and in terms of time. Significant numbers of university and school-based educators and prospective educators work in the same school and spend significant amounts of time there. Structures and processes need to be in place in order to support this kind of clustering.

Other observations about these sites are also worthy of note. In each of the sites, significant changes in the on-campus teacher preparation program have accompanied the development of the PDS. Programs are organized around new curriculum strands; different instructional strategies are emphasized; faculty time is used differently; bachelor's programs have been extended to five years and/or are joined to master's programs; and partnerships include arts and science faculty as well as school district faculty and administrators.

In each of the sites described, there is a successful integration of all of the functions of the PDS. For example, research and inquiry are embedded in university- and school-based faculty roles, and interns do research projects in schools. This integration leads to a different conception of teaching and learning in the school and university. Teaching, service, and inquiry take on new meaning and are realized across institutions.

Each of the exemplars also illustrates the importance of broad institutional support for the PDS. At the University of Cincinnati and Montclair State University, presidents championed the teacher education program. Cincinnati offers a meaningful example of the importance of teacher union support and school district partnership.

Many of these themes were foreshadowed in the survey conducted early in the Project. They emerged in the conversations of the Chicago Conference. Ultimately, they became important elements in both the structure and content of the draft PDS standards.

It is beyond the purposes of this introductory chapter to provide a full review of all of the sources drawn upon in the PDS Standards Project. However, it is important

that readers are aware that the project relied not only upon the commissioned work included in this volume, and the extensive PDS literature reviewed by Teitel, but also upon significant knowledge bases on learning to teach, the culture of schools, interinstitutional collaboration, and education reform. Additionally, we were informed by ongoing work to develop professional standards for both new and highly accomplished teachers (from INTASC and NBPTS, respectively). Most important, the draft standards were developed on the basis of what PDS participants—school-, university-, and district-based—told us was important in quality PDS partnerships.

About the Draft PDS Standards

As suggested above, the PDS Standards Project sought to create standards that could achieve a delicate balance in serving two important functions:

- to identify the distinguishing characteristics of PDSs, and
- to support the development of quality PDSs.

In our attempt to serve these two functions, three important features of the standards emerged. First, they are written to recognize the developmental nature of the institution. Second, they are organized around the critical attributes of the PDS, rather than around the main functions. And third, they recognize the importance of input, process, and outcome standards.

Stages of Development

The draft standards recognize three stages of PDS development: pre-threshold, threshold, and quality attainment.

Pre-Threshold

Some participants refer to this stage as the 'time before the beginning.' Partnerships at this stage are engaged in the creation of important relationships and trust among participants, which is necessary for the Threshold Conditions to be effective in supporting the work to be done. At this critical stage individuals build relationships based on mutual values and understandings, and early collaboration between school and university faculty takes shape. Memos of understanding may be transacted about shared expectations and activities in which partners will participate together, although these memos are understandings among individuals and not commitments among institutions. We found in our work with PDS sites that two critical characteristics emerge even at this early stage: the partners recognize the need to integrate the four functions of the PDS, and they share the expectation that all partners will change as a result of the partnership.

Threshold Stage

Site participants identified characteristics they believed must be in place in order to provide the support or foundation for the PDS to develop attributes that distinguish the partnership as a professional development school. These characteristics were called Threshold Conditions and they focus mainly on the institutional commitments that support PDS development. These Threshold Conditions typically benefit from the

prior relationships which are nurtured in the pre-threshold stage. PDSs are high-stakes partnerships because they address the entire continuum of professional development, student learning, and research. They require broad community or organizational support. The commitment of the university, school of education, school district, school, and teacher union/association are critical to attaining the resources and conditions that are associated with successful PDSs. The following five Threshold Conditions were agreed upon:

- an agreement which commits school, school district, union/professional association, and the university to the basic mission of a PDS;
- a commitment by the partners to the critical attributes of a PDS;
- a positive working relationship and a basis for trust between partners;
- the achievement of quality standards by partner institutions as evidenced by regional, state, national or other review; and
- an institutional commitment of resources to the PDS from school and university.

In meeting these conditions the partners reach a shared understanding of where they are going and have made commitments regarding how they will get there. These conditions are necessary to provide the infrastructure for the hard work of creating a new institution with the following critical attributes.

Critical Attributes

The Quality Standards that were identified represent what our participants believe to be the essential attributes of a PDS associated with fulfilling the PDS mission. The Quality Standards are written for the critical attributes. Each of the critical attributes is believed to be applicable to each of the PDS's functions. Several indicators are provided for each standard, all of which would be present in a highly developed site. Each indicator is accompanied by a set of examples: what might be seen or heard or found in a PDS site as evidence that the indicator is being addressed. The five critical attributes are:

I. Learning Community

The PDS is a learning community characterized by norms and practices which support children's and adults' learning. Indications of a learning-centered community include public teaching practice, integration of intern and teacher learning with school instructional program, collegiality, inquiry, and dissemination of new knowledge. Opportunities to learn are equitably supported.

II. Collaboration

A PDS is characterized by joint work between and among school and university faculty directed at implementing the mission. Responsibility for learning is shared; research is jointly defined and implemented; and all participants share expertise in the interests of children's and adults' learning.

III. Accountability & Quality Assurance

The PDS is accountable to the public and to the profession for upholding professional standards for teaching and learning and for preparing new teachers in accordance with these standards.

IV. Organization, Roles, and Structures

The PDS uses processes and allocates resources and time to systematize the continuous improvement of learning to teach, teaching, learning, and organizational life.

V. Equity

A PDS is characterized by norms and practices which support equity and learning by all students and adults.

Next Steps

A grant from the DeWitt Wallace-Reader's Digest Fund will allow us to take the next steps. The PDS Draft Standards will be field-tested and revised over a three-year period.

There has been little attempt to date to associate specific indicators or examples with stages of development in a PDS beyond the Threshold Conditions. A continuum of development is embedded in the many examples given but it has not been drawn out in any deliberate way. This is one of the goals for the field-testing effort. By working with the draft standards intensively at real sites we hope to revise them in ways that reflect what PDS participants believe is important in making this innovation succeed.

Another important goal will be to design and implement an assessment process that is consistent with the draft standards and with the nature of the PDS as a collaborative, developmental institution. The strategy for refining and revising the draft standards and building the assessment process will be one of partnership with voluntary pilot sites representative of the universe of PDSs.

Darling-Hammond (1992) reminds us that standards for good practice cannot be legislated to practitioners. The definition of professionalism includes the involvement of practitioners as a collective group in defining, transmitting, and enforcing professional standards of practice and ethics. The broad community that has contributed to the PDS Standards Project has been engaged in what may be the most potentially powerful work they could do: the establishment of standards for institutions that carry the responsibility for supporting the development of professional practitioners.

References

Darling-Hammond, L. (1992). Accountability for professional practice. In M. Levine (Ed.). *Professional practice schools: Linking teacher education and school reform* (pp. 81-104). New York: Teachers College Press.

Worthy of the Name

Standards for the Professional Development School

Gary Sykes

An earlier version of this paper appears in ***Making Professional Development Schools Work*** *(pp. 159-181). M. Levine. & R. Trachtman (Eds.), NY: T.C. Press. It is reprinted with the permission of Teachers College Press.*

Efforts already are underway to establish standards for professional development schools (PDSs). Universities across the country are creating formal agreements of various kinds with cooperating schools and districts in which standards, explicit or implied, are emerging. And, the National Council for the Accreditation of Teacher Education (NCATE) has launched a national project to set PDS standards in the context of professional accreditation of schools of education. Activity, then, will likely outstrip the information and observations contained here, but what may be reviewed are some general considerations about standards-setting for PDSs, together with some tensions and issues likely to emerge through the choices that standards-setters make.

The decision to set standards for PDSs signals their importance in developing a true profession of education as part of the larger effort to improve American education. The PDS, its advocates hope, will become a crucial institution supporting the preparation of educators, the conduct of applied inquiry, and the improvement of schooling. Before the question of standards is taken up, a brief account of the central aspirations for the PDS will set the stage.

The PDS and the Professional Agenda

At the heart of the PDS idea is the firm intention to improve substantially the preparation and continuing education of educators. A truism is that no one learns to teach in a university—one learns to teach in a school, to study education at a university. This point may seem obvious, but the institutional arrangements to prepare teachers have never reflected it. The prevailing model tacks fifteen to twenty weeks of practice teaching onto a slender collection of university courses, with these two strands but loosely connected to each other. If long-term, deep relations are created between schools and universities, the historic breach may be healed and a much stronger form of professional education may emerge. The PDS, then, is a school where novice educators intern for extended periods, learning to teach under the combined tutelage of university and school faculty who co-plan and co-teach the professional studies sequence. Furthermore, because subject matter is so central to good teaching, the relevant university faculty include representatives not only from the school of education but from the liberal arts and sciences. Through the creation of shared tasks and responsibilities, the intent is both to enrich the intellectual life of the school and to enhance the professional studies around stronger theory-practice connections. Equally important, the PDS also models excellence in continuing professional development for educators; it is a site where all

the educators are committed to ongoing learning and are actively engaged in this pursuit as an integral aspect of the school's mission.

The PDS also participates in the reconstruction of educational inquiry, for many see a disconnection between the research that occupies faculty time on university campuses and the efforts to base educational improvements on new, warranted knowledge. The conduct of inquiry in education owes more to academic traditions in the social sciences than to direct concerns about educational practice. "The oft-noted hiatus between educational theory and educational practice," writes Schlechty, "exists in part because theory tends to be generated in a culture where it does not apply (the university), and efforts to apply theory are made in a culture where few theoreticians practice (the schools)" (pp.44-45, 1990). He goes on to distinguish a fundamental difference in the normative order appropriate for disciplining ideas—the liberal arts institution—and in that for disciplining practice—the professional school. This class in orientation he summarizes by asking, "Should practice be based on theory or should theory be based on practice?" The liberal arts academy he identifies with the first choice, the professional school with the second. Schools of education long have suffered divided loyalties between these orientations. The PDS clearly comes down on the side of the professional school, serving as a crucial site for creating theory out of study and combing theory with practice. The PDS is a vital institution in the formation of a genuine professional school, where new knowledge may be generated through, and employed to improve, practice.

The PDS represents another professional principle, articulated most clearly by Goodlad (1990, 1994): the renewal of schools and of professional education must occur in tandem. To overcome the long-standing dichotomies between theory and practice, laboratory and clinic, reformed and received doctrine, knowledge as proposition and knowledge in use, interventions must simultaneously embrace university-based professional education and school-based educational practice. The fundamental unit of reform must include both spheres, for each contributes essential perspectives and resources. The professional agenda as articulated through such means as state licensure, content and teaching standards, and school restructuring ideas cannot prosper in the long run and across many locales without school-university partnerships dedicated to mutual renewal.

Then too, the PDS indicates a strategic choice within the broad reform agenda known as professionalization. The professional agenda seeks to create through policy and other means an educator workforce imbued with the knowledge, skills, and dispositions—supported by structures and resources—that are conducive to good teaching and learning. Standards of many kinds play a prominent role today in this agenda. These include curriculum content standards often developed by subject matter associations; licensure and certification standards created by states and the National Board for Professional Teaching Standards (NBPTS), respectively; student learning standards defined through a variety of assessments; school standards represented in accreditation; and others. The PDS takes its place within this mix but makes a unique contribution. It functions, in theory at least, as an integrating site where multiple professional standards may be combined in service to the creation of new professionals and new knowledge. The PDS poses that the production of professionals is a vital link in any chain of educational reform whose other links specify what is to be learned, what constitutes good teaching, and what resources are necessary for full opportunity. Although in principle all schools ought to be

exemplary sites for professional learning, this ideal is not a reality within the current system, so professional reformers seek targets of opportunity where they can concentrate effort. To this end, PDSs must be regular schools that face the full range of conditions in our society and that foster special capacities to develop new professionals and new knowledge. Within a broad theory of reform, the PDS represents an answer to two crucial questions: How will educators learn to teach to the new standards? How will the new standards be implemented in the range of real schools?

Furthermore, the PDS represents the conviction that reform standards of all kinds are neither self-evident nor self-implementing. As other standards setters are discovering, a sizable learning agenda lies ahead in working out the day-to-day implications of new standards for teaching and learning in a wide array of school-community contexts. The vanguard mathematics standards of the National Council for Teachers of Mathematics (NCTM) have certainly supplied an important focus but have not settled what teaching to those standards looks like. Early evidence of standards for teaching and learning indicate that they operate more as an invitation to discovery and invention than as a template directing practice (see, for example, Ball, in press). Educators working in concert within particular schools are needed to realize the vision of "systemic reform," and PDSs, along with other schools, may play this role.

These aspirations for the PDS—to improve dramatically teacher education and continuing development; to ground educational inquiry more directly in practice; to stimulate the mutual renewal of schools and of university-based professional education; and to represent an integrating and implementing site for professional standards—serve as the broad context for PDS standards.

What Is a Professional Development School?

Professional development schools are regular P-12 schools that have entered into partnerships with universities to assist in the preparation of future educators and to serve as sites for research and development.[1] These twin functions are deceptively simple, for their authentic pursuit establishes several ambitious requirements. One is that educational practice, evidenced in organization, management, curriculum, teaching, and community relations, be "exemplary." Put differently, the PDS strives to represent "best" or "state of the art" practice in its various elements taken singly and together. This is a requirement because professional education must transmit best practice, which is best learned from exemplary practitioners—at the school and the university. A second requirement is that both the university and the school must alter certain of their features in order to support the partnership and its mission. For example, time and other scarce resources must support the additional responsibilities of professional education and collaborative research. Rewards and incentives must encourage these pursuits. New roles and role relationships must be created, and new governance arrangements must support joint decision making and conflict resolution. Third, the partners must develop new capacities to manage the relationship and to carry out the shared responsibilities. Both school and university personnel must learn how to work together. Administrators must learn how to manage a more complex organization that involves new sources of authority. University and school faculty must learn how to conduct collaborative inquiry and how to supervise and evaluate the work of novices—intern or practice teachers and other school personnel.

These two functions—professional education and inquiry—supported by these three requirements—pursuit of exemplary practice, facilitating changes in each partner institution, and creation of new capacity via learning—establish the broad parameters for standards.

Why PDS Standards?

Should anyone create standards for PDSs, though? This question is important to raise at the outset, and both sides have arguments. Opponents argue that professional development schools are fragile, delicate collaborations built on trust that must be nurtured carefully over time, face to face, through many mutually satisfying interchanges among the faculty and students of universities and schools. Particularly in the early stages, the likelihood of distrust, suspicion, miscommunication, and conflict is great. The educators must patiently work through these problems and help move all the participants toward more trusting, productive relations. Standards prematurely invoked and enforced are likely to disrupt and distract the process of community-building.

Opponents also argue that the PDS by its nature is an open-ended innovation to be invented by the participants. Guidelines, principles, descriptions, and statements of purpose are all useful aids to direct and stimulate invention; it is an error to regard the PDS as a detailed and tightly specified entity that must conform to certain external standards. Rather, the PDS is a concept that may take a variety of forms; its realization requires active experimentation and adaptation to local circumstances. Again, the premature development of standards by parties external to, and removed from, the local scene will work against the promise of the PDS. Look to history, urge the opponents of standards. Witness the many complex innovations attempted and found wanting long before they had received a fair trial. Perhaps in the future, when sufficient experience with PDSs has accumulated, standards may be useful. For the foreseeable future, however, they can only detract from the work. Standards are not flexible garments, pleasing to the eye, that protect the wearer. They are straitjackets likely to confine and repress creative expression and necessary adaptation.

Proponents of standards offer a counterpoising set of arguments and a different reading of reform history. The PDS is in theory an ambitious, even radical reform that demands difficult, disruptive change from both partner organizations. The great danger is in losing the transformative potential of the idea to downsizing pressures and tendencies, whose most egregious instance is relabeling as PDSs those schools that do little more than accept student teachers. Champions of the PDS movement worry about the authenticity of the efforts underway and the fidelity to difficult ideals. Without a strong set of external standards, the PDS is unlikely to emerge as the pivotal institution its advocates intend. Standards provide one means for identifying the necessary elements that all PDSs worthy of the name must share. The history of educational innovation from this perspective is a chronicle of nonevents—superficial, cosmetic changes touted as bold, dramatic departures.

Another argument for standards is that they can direct and assist in the creation of these schools by indicating what must be done, what must be included. Standards have the potential to educate those who embrace them, by pointing to the necessary elements that must be achieved. Advocates argue that the activity of standards-setting can be a useful process for clarifying the PDS, one that moves from general principles and descriptions to more precise, concrete guidelines to inform the work.

These opposing views operate within different but overlapping spheres of action, each projecting a vision of reform. One sphere is local, where PDS educators are intensively engaged in the work. Associated with local effort is the vision of a reform network that informally connects local actors to one another for purposes of social support and the sharing of craft knowledge. "Standards" may flow through support networks, but in the form of advice, persuasion, and norm formation. Within this vision, like-minded reformers make lateral, informal connections with one another for purposes of mutual assistance. Reform networks tend to be non-hierarchical, voluntary, and non- or quasi-governmental.

A second sphere is state and national, where reformers engaged in the project to professionalize teaching seek to link large-scale associations both to local action and to government. Advocates in this sphere work to forge public-professional compacts that exchange resources for the legitimacy conferred by law. The vision of professionalization connects associations representing the profession to government agencies with the authority to promulgate standards for institutional accreditation and individual licensure. Standards in this sphere are authoritative and binding safeguards issued by the state but developed by the profession. Professional reformers rely on hierarchical, mandatory, formal, and governmental relationships to structure the process of standards-setting. As the reader will note, these terms may be summed up in a familiar and unsettling term: bureaucracy. Critics of standards worry that when government takes over standards-setting, all the dysfunctional features of regulatory policy emerge. Advocates, however, hope to avoid this evil by creating a process managed primarily by the profession.

Finally, if professional development schools are to grow in number, credibility, visibility, and centrality, then they must move from having temporary, project status to maintaining core significance in the plans of education schools and cooperating school districts. Long-term support from both national and state levels and district and university levels will be needed. External standards will serve as a warranty in persuading outside constituencies to provide the support. The culture of accountability in education is so strong that no reform with systemic intentions can long delay developing publicly credible ways and means for being held to account. Standards-setting, then, is part of a long-term political strategy to support the fledgling PDS movement.

Both sides in this debate have good arguments. Is it possible, though, to gain the benefits of standards while avoiding the liabilities? The design of standards must meet this test.

Developmental Standards and the Process of Change

In the case of the PDS, standards serve as agents of change. This is a central argument of this paper, and it bears repeating: PDS standards serve as agents of change. The PDS is a new idea that must be realized between two old institutions that each must change in certain respects. As Sarason (1982) has observed, changing institutions is far more difficult than creating new ones. The PDS has no exact counterpart historically, although analogies with laboratory schools, teaching hospitals, agricultural extension agencies, and others are frequently invoked. Likewise, schools and universities have historical relationships of various sorts that provide both starting points for, and impediments to, the formation of PDSs. But as

the critics of standards rightfully argue, launching a PDS inevitably plunges participants into complex, contentious changes in how both the school and the university operate. Standards somehow must account for the process of change. A well-functioning PDS does not spring up overnight. It evolves gradually through phases of exploration, early initiation, continuing implementation, and full operation. The trajectory traces cycles of dialogue and action; a gradually expanding set of participants; a gradually enlarging sphere of activity; and a movement from unaccustomed, innovative practice to stable, institutionalized relations.

There is an external dimension to the change process as well, an ancient tension in the history of educational reform. On the one hand, study after study has reiterated that creating worthwhile change in schools takes considerable time and must be managed with great skill and persistence. On the other hand is the press for tangible results that comes from outside interests whose support is essential to the overall effort. Among these may be counted public and private funding sources, state as well as district and university leaders, professional associations, and such interests in the larger public as parent groups and the business community. Those involved in changing their practices and their institutions testify to the hardship of simultaneously operating an institution and changing it. They face not only the problems of overload and stress but also the challenge of bringing all the membership along. Forming the vanguard is but the first step in convincing a much wider circle that both the new direction and the journey are worth pursuing. Those on the outside inevitably fix their gaze on the desired outcome, the bottom line, and demand results, usually more quickly than participants can produce or demonstrate them. Change leaders live in the space between these realities and seek to manage this basic tension.

The standards-setting process must accommodate the developmental nature of the PDS. Standards should assist all the participants in managing the tensions of change. Standards should be developmental in several senses:

- The process of creating standards should engage a range of participants in cycles of formulation, test, and revision.
- The standards themselves should undergo regular revision and refinement.
- The process of applying the standards should encourage school-based learning in response to feedback.
- The standards should account for the developmental stage of the school at the time of application.

If PDSs trace a path from initial exploration between interested parties to initiation, expanded implementation, and, eventually, mature operation, then the standards applied in an institutional assessment should take into account the stage of development. The most likely prospect is that PDSs would not volunteer for external review until they had reached a certain level of maturity, with the foundation laid in terms of commitment to basic principles, the most important being the student-centered nature of the endeavor. It may be wise to formalize this process by establishing some threshold conditions that schools must meet before they apply for review. These conditions would ensure that the school and the university had agreed on basic principles and mission, had established positive working relationships and the basis for trust, and had initiated some joint activity around professional education and inquiry.

Standards-Setting as a Learning System

A central puzzle within the educational K-12 standards-setting movement is how to link national to local action. On the one hand, national standards, such as those promulgated within the Goals 2000 legislation, seek to raise expectations for learning across the country. Within the national arena, knowledge elites develop the standards, and then use combinations of governmental inducements (i.e., grants) and mandates (i.e., requirements for curriculum and assessment) to secure attention and compliance. Within this scheme, the federal government supplies the stimulation by means of expert-produced standards and grants to states, and states supply a mix of assistance and regulation to localities. At the same time, if standards are to have real significance locally, then both commitment and learning are needed. Localities must initiate processes through which they scrutinize, adopt, and adapt standards, learning how to teach and reach them. Within this model, conflict between national and local is not inherent, but there is plenty of room for it; whether this approach will work out is open to question (Cohen, 1995; Eisner, 1995). Is this the model for the PDS?

A useful principle here distinguishes regulatory from programmatic approaches to policy development (Elmore, 1983)—designing controls versus building capacity (Darling-Hammond, 1993). The relationship between an authorizing entity and a local respondent may be organized around compliance, with a set of rules or regulations that the center develops and the periphery implements; or, it may be organized around exchanges that aim to "improve and support the capacity of public organizations to deliver services" (Elmore, 1983, p. 346). Within this latter construction of national-local relations, standards serve not as rules that exact compliance but as guidelines that convey information. Expressed metaphorically, interchanges between national and local levels resemble reflective dialogue between two professionals working on a problem rather than an encounter between a state trooper and a motorist caught speeding. The aim in the first instance is mutual learning around a central problem of practice, whereas in the second it is compliance with the law. The one image is as congenial as the other is forbidding, which suggests a misleading dichotomy or a false choice; therefore, a closer look is needed. What exactly would a "programmatic" or "capacity building" approach to PDS standards involve?

For our purposes we may propose any number of national entities that represent the educating professions' interests in standards. NCATE is engaged in a project to develop PDS standards in the context of accreditation. The Holmes Group (1995) has recommended standards for the PDS in its most recent report. Such groups, together with others who supply experience and expertise (e.g., NCREST, the School Development Project), may join in the first stage to develop a set of national standards whose authority derives from the weight of professional judgment and the consensual process through which the standards are formulated, reviewed, revised, and eventually adopted.

The next stage in a capacity-building mode is most critical. The standards are offered to local institutions on a voluntary basis as the focus for dialogue and scrutiny. The national agency sets forth a general, provisional set of guidelines that may be put into practice in a variety of ways. The art comes in supplying guidance that firmly indicates what is required yet grants enough latitude to encourage local use and adaptation to context. The national agency undertakes to manage a learning system made up of many dispersed schools that are experimenting with the standards. The national agency's role is to stimulate local learning and to facilitate the flow of

information across sites. Participating schools use the standards both to gauge their own development and to refine the standards themselves. Initial standards-setting is relatively decentralized, with learning flowing from school to school and from the schools to the national agency rather than from the national to the local level. In a third stage, as expert consensus emerges on the basis of experience, the national agency may progressively codify the standards, increasing their specificity and uniformity, but this would occur much later in the process.

This is not the customary approach to standards-setting. Schon (1971) draws the contrast in the following way. Writing about the development of governmental policy, he first describes the conventional approach:

> There is a particular version of the center-periphery model, broadly and powerfully held at least in the United States, in which central formulates specifications for a new policy, makes funds available for its implementation, and solicits proposals from local agents for behavior conforming to the policy. Central then rewards certain proposers with funding, punishes others by withholding funds, and proceeds to monitor the behavior of local agents for conformity to proposal. Withdrawal of continued funding is the sanction invoked to enforce compliance. There is sometimes the further notion that the local agents will, after a time, secure their own resources to continue implementing the policy. (p. 147)

This "propose-dispose" model, he argues, is seriously flawed, not least in its inability to stimulate local commitment and learning. He then outlines his preferred alternative, policy as a learning system:

> Government cannot play the role of "experimenter for the nation," seeking first to identify the correct solution, then to train society at large in its adaptation. The opportunity for learning is primarily in discovered systems at the periphery, not in the nexus of official policies at the center. Central's role is to detect significant shifts at the periphery, to pay explicit attention to the emergence of ideas in good currency, and to derive themes of policy by induction. The movement of learning is as much from periphery to periphery, or from periphery to center, as from center to periphery. Central comes to function as facilitator of society's learning, rather than as society's trainer. (pp. 177-78)

This latter approach places primary emphasis on learning, on stimulating development, and on capacity building. It assumes that all the agents involved in standards-setting must learn, including those who set the standards and those who "implement" them in schools. The aim of the standards-setting enterprise, then, is to support the development of strong professional development schools throughout the country, linking them together in a network around the standards that schools shape and are shaped by.

Standards-setting as a learning system is a conceptual approach that might be carried out by means of a number of models.[2] For example, the evaluation of complex organizations is the mission of state inspectorates in many nations, among which the most prominent has been Her Majesty's Inspectorate (HMI) in Great Britain.

Other models are the regional accreditation of secondary schools in the United States and the national accreditation of schools of education by NCATE. Within the medical field are well-established standards for teaching hospitals, which include specific standards for internships and specialist residencies. In addition to these accreditation and review processes are those that result in awards for excellence, including, for example, the Malcolm Baldrige National Quality Award issued by the Commerce Department's Bureau of Standards to outstanding American firms.

Each of these models bears a close look, but another variant, the School Quality Review, may fit particularly well with the conceptual approach advocated here. This model was initiated in New York State some years ago on the basis of interest in HMI. It is based on a combination of self-study and the formulation of local mission and goals statements, together with reference to external standards and goals of various kinds (see Ancess, 1994, for a description). Review teams visit a school, examine its mission and goals and other aspects of school functioning, observe classes directly, and interview members of the school community. Their report back to the school serves as stimulus for continued development. This model could be adapted to include such other features as the progressive refinement of the external standards and the cross-school sharing of ideas and approaches.

Source, Scope, Unit, and Type of Standard

The general model to be used is the central choice that standards-setters must make, but there are several other decisions as well, including the source of standards, their scope or range, the unit of analysis, and the type of standard to be employed.

Standards-setters might consider a number of **sources** for PDS standards. One is practice that has been nominated as exemplary. Standards may be derived through the study of "good" schools as indicated by knowledgeable observers in relation to carefully stated criteria. Another source is research knowledge accumulated through systematic inquiry on effective practice. Research cannot serve as the sole basis for standards, but it can augment other sources and anchor judgments where usable, warranted knowledge has been amassed. The obligation of standards-setters, then, is to consult the relevant research whenever it is available. Yet a third source is professional consensus as represented in existing standards or new standards formed explicitly for the purpose. PDS standards will likely be an amalgam of these sources, resembling the NCATE standards in this respect. PDSs might adopt existing, well-regarded standards to evaluate certain aspects of their functioning, but they will also need to craft some new standards grounded both in good practice emerging around the country and in the steadily accumulating research on such topics as teacher learning. The image that comes to mind is the patchwork quilt, formed from many serviceable pieces of work. Because the PDS is a new social invention, its principles cannot be cut from any whole cloth. Rather, they must be assembled from ready-to-hand materials, then refined through use. Multiple sources of generation and justification will be necessary in this construction process.

Questions of **scope** deal with the institutional functions under review. The core functions, it may be argued, are those that are shared between the university and the school and include professional education and inquiry. This perspective argues to restrict the scope of standards-setting to those functions, but the matter is not quite so

simple. At issue is the idea of "exemplary practice" as that may be defined schoolwide and within particular areas of instruction. One ideal is to apprentice novices to master practitioners working in professional school cultures who convey best practice through precept, guidance, and example. Arguably the quality of instruction in a PDS and the quality of the school itself are crucial learning resources for professional education and so should be included within the scope of standards. Such schoolwide features as the character of decision making, the stance toward inclusion, the presence of such practices as tracking and using labels to sort children, relationships with parents and the community, the extent of collegial interaction among educators, and many others are relevant to professional internships. The character of instruction in the classroom is equally pertinent. Do teachers reflect contemporary standards of mathematics and science, for example, that emphasize such precepts as teaching for conceptual understanding, creating a learning community, fostering active learning, setting high expectations for all learners, responding sensitively to individual learners, capitalizing on students' social and cultural diversity, and others?

As a cardinal principle, PDSs must be student-centered institutions, where the learning and well-being of children are the first priority of all educators. This may sound self-evident, even trite, but it is not when one considers the many competing priorities and diversions that schools face. This principle requires that standards attend first to the quality of attention paid to children and to the centrality of their learning. It asserts that a PDS that supplies evidence of exemplary inquiry and teacher education while reflecting indifference to children in any important respects should not be recognized as worthy. Naturally such a broad principle admits considerable latitude in interpretation and application, but without this bedrock commitment, no other mission priorities can be judged acceptable.

Such expansive standards encompassing all aspects of "the good school" are likely to be controversial and to provoke conflict between the school and the university. PDSs operate in a gray zone of authority, oriented partially to the district's school board and administration, partially to the university. PDS standards that influence all aspects of schooling potentially challenge the school board's authority in favor of the university's. And conflicts also will emerge between university faculty imbued with the latest reform ideas and school faculty engaged in traditional practice (see, for example, Kagan, 1993). Quality standards, then, might target professional education and inquiry, overall school functioning, and instructional practice. Within the PDS these cannot be neatly separated, but dangers are evident in tackling the whole and all its parts. How should standards-setters come at this issue of scope?

The first issue to address is the idea of exemplary practice. A misleading notion here is that the teachers in a PDS must be paragons, master teachers all, capable of initiating novice teachers into reform- and research-based practice. The quality of instruction in a PDS is a crucial matter, but a realistic conception of best practice suited to the PDS has two aspects: a schoolwide commitment to inquiry and continuous improvement (Little, 1982), where educators are engaged in regular study of their practice and in efforts to make improvements, and the use of professional standards of various kinds as points of reference for improvement. Standards, for example, might include those of the NBPTS, GOALS 2000, various professional associations, and the state or district. The standard to which a PDS faculty commits itself, then, is a steady striving for excellence gauged against the best professional thinking available.

The second principle regarding scope begins with a concentration on the aspects of the PDS mission that are most clearly shared. The initial focus should be on the organization, resources, conduct, and results of PDS-based professional education together with the conduct of inquiry. The focus of standards-based dialogue should be on these functions of the PDS as starting points for trust building and the progressive deepening of the collaboration. Gradually, out of such dialogue can emerge broader concerns for the school community and the character of instruction.

Another issue concerns the **unit** to which PDS standards apply. The school is the obvious target, but schools are members of larger organizations and contain subunits within them. NCATE accreditation, for example, consists of both unit and program standards, the former referring to the school of education as a whole, the latter to individual program areas within the school (e.g., teacher, counselor, and administrator education). What are the analogs for the PDS?

Within the PDS, various subunits exist, including most obviously the departments within a high school or such areas as social services, special education, or interdisciplinary teams within elementary or middle schools. Research indicates significant variation across departments within the same high school (see, for example, McLaughlin & Talbert, 1993; Siskin, 1991). Teaching interns in the mathematics department may be socialized into a highly professional, collegial work culture, whereas those in the same school's social studies department may encounter an isolated, divided faculty. The quality of professional internships, then, may vary considerably within, as well as between, schools—a matter of concern for PDS standards. Uneven practices within schools are an important issue, then, for standards.

Likewise, the PDS operates within a partnership between the district and the university, which may itself be subject to standards. As part of a PDS review, examiners may ask about the degree of commitment from the university and the extent of its involvement in terms of core faculty, resource exchanges, and integration of the PDS into the school of education's overall operation. These are all matters that partnership agreements may cover, but they also are integral to the functioning of the PDS. The larger intention of the PDS movement—to reform university-based teacher education and inquiry—comes into play here as a focal concern. Professional development schools do not—must not—operate on the presumption that the schools must be "fixed" by the university, which places itself above reform. Rather, the spirit of the PDS movement is shared, mutual improvement, with both partners committing to necessary changes. Standards must reflect this spirit and must comprehend both institutions.

A single set of standards for the school should be developed, with appropriate reference both to the standards and practices within subunits of the school and to how parallel processes within the university support the PDS. Some schools, for example, build in regular cycles of review around particular areas of the curriculum (e.g., reading, mathematics, and science); such continuous improvement processes could be a feature of a school review so that the entire curriculum is not reviewed all at once, but over time. School standards, then, would specify that such area by area reviews be a regular feature of the school. And, conceived as a partnership rather than as a single institution, the PDS should be able to demonstrate significant support from both cooperating partners.

A third important issue concerns the **type** of standards employed to evaluate the PDS. The most common typology distinguishes among input, process, and outcome standards, with a major shift underway in our society from input standards to a

combination of process and outcome standards. The larger movements affecting these shifts include a greater attention to results, outcomes, or performances as a basis for linking individual assessment to judgments of institutional effectiveness and the quality movement in American business that emphasizes process measures as a basis for quality improvements. At the same time, however, the serious questions about the resources devoted to PDSs call for attention to inputs.

For example, external examiners might want to know about the arrangements for supervising intern and practice teachers. How many interns are placed in a PDS? How often are they observed and by whom? What opportunities are provided for guided practice and self-study of teaching through videotape, supervisory conferences, and other means? These are input questions, which direct attention to the resources supplied to the PDS by the partner institutions. As well, examiners also might ask about the governance arrangements in place, look into the quality of supervisory discourse, inquire how intern teaching is related conceptually and practically to other learning within the professional studies, and determine whether those in supervisory or evaluative roles have been prepared properly for their responsibilities. These are all aspects of school process that require close scrutiny. Finally, standards also might attend to the learning that results from PDS experiences. Several approaches are available. One choice is to examine the learning itself as evidenced by conventional tests, performance assessments, direct observation, and other means. Another alternative is to examine the processes that the school uses to evaluate student learning by sampling the learning itself (this procedure actually substitutes a process for an outcome standard). Another variable here is institutional versus "client" or "customer" assessments. Schools may gather evidence of learning and evaluations of graduates from faculty, from the students themselves, or from employers. These choices all concern ways of gauging institutional outputs, which are typically judged against program goals or objectives.

The spirit of this approach parallels development within the accreditation field generally. The major shift underway, complicating traditional accreditation procedures, is the much greater attention given to the assessment of outcomes as both an institutional process and a basis for judging institutional effectiveness directly. In his wide-ranging treatment of accreditation issues, Ewell (1992) notes several critical choices for institutional reviews, including validating quality (directly) or the quality assurance process and certifying quality versus stimulating improvement. As part of the quality revolution sweeping American business, he notes a number of implications for institutional review:

> First, the content of information moves from a comparison of institutional goals, resources, and processes with implied fixed standards to include a comparison of obtained results with established goals. Second, the primary role of evidence is to indicate progress rather than to certify attainment, and patterns of indicators are intended to be used in combination to suggest effectiveness rather than to establish piecemeal the degree to which individual standards are met. Third, provided evidence should indicate a concern with the institution's "customers" (students, employers, and community) as well as its own members. Finally, the primary case to be made is less the fact that the institution meets minimum fixed criteria than the fact that it has the capacity, the will, and the culture to continuously improve. (pp. 11-12)

As with the School Quality Review, this description indicates that the ultimate aim of external standards setting should be to establish a culture of review and ongoing improvement that is based on evidence. This aspiration fits well with the capacity-building approach and the goal of stimulating PDS development nationwide.

The Content of PDS Standards

Standards-setting for the PDS should stress self-study and improvement, concentrating on the shared work of the school and the university—professional education and inquiry. Exemplary practice should be identified with improvement processes that are inquiry-oriented and standards-based, using the best guidance available. External standards should be developed gradually, on the basis of local learning, with a variety of established standards for such subprocesses as curriculum content, performance outcomes, teaching, professional development, and others. The standards should include reference to resources or inputs, processes, and outcomes. Threshold conditions should be established as a baseline for external reviews. The overall process should be treated as a learning experience both locally and nationally. Local feedback should stimulate development, and the national agency should speed the flow of information about good practice in the PDS around the network while continuously modifying the standards in light of what is learned from local innovators.

A starting point is needed, however, to establish the content areas or categories within which to develop more detailed guidance. In addition to a set of threshold conditions, four broad domains organize the standards: (1) mission and goals, (2) quality assurance processes, (3) the school and the university as a learning community, and (4) learning and development outcomes.

Threshold Conditions

The purpose of threshold conditions or prerequisites is to protect those engaged in standards setting and PDS development from premature evaluation. The aim is not to create cumbersome barriers but to ensure that groundwork has been laid locally and that collaboration has commenced so that meaningful activity within the school may be assessed. Prerequisites function as a kind of standard, a form of guidance about what must be established before operational standards may be applied.

First are shared commitments to basic principles. Participants should agree on the core values undergirding the PDS which should focus on the learning and development needs of students from the school and the university. At the heart of every PDS must be a deep resolve to promote the learning of all students, including those who attend from the surrounding community and from the university as intern or practice teachers. The essential starting point for any PDS is an explicit agreement on the learning goals and commitments that will unite school and university faculties in common pursuits, emphasizing their common identity as stewards of learning.

Second, resource exchanges and agreements should be firmly established and documented, particularly around professional education and inquiry. To implement the PDS mission, what resources must each partner provide? Resources will include reference to time, funds, personnel, and materials. Resources may be supplied externally or may be located internally and be based on restructuring. For example, at Holt High School, a PDS affiliated with Michigan State University, the faculty

worked out a plan to revise the school schedule to make Wednesday mornings available for PDS planning and professional development. Students now arrive after lunch on Wednesdays, and faculty work on professional matters in that regularly scheduled time period. Schools across the country are becoming inventive in locating time for professional activity. A PDS already has potential resources available in the form of interns, graduate students, and university faculty and staff. Such personnel may be deployed in a variety of ways to support the learning of all participants. Resource exchanges of various kinds can support the PDS mission (see, for example, Theobald, 1991, and the cases in Darling-Hammond, 1994), and plans for such exchanges should be formally articulated.

Are there external standards against which to judge resource adequacy? These are not yet available, so standards-setters will want to begin developing more detailed guidance for this area as experience accumulates across schools.

A third threshold condition establishes the meaningful involvement of key participants. Such assurances cover the extent of school faculty involvement and of the university's commitment, which includes not only graduate students and support staff but regular, tenured faculty from both the school of education and the liberal arts and sciences departments. For both the school and the university, these are tough-minded conditions. On the school side, some PDSs engage only a small subset of the total faculty and so cannot be considered to have made a schoolwide commitment in any sense. Although the standard may not be full participation, and there will be many degrees of involvement in PDS-related work, substantial participation of school faculty is a requirement that should be documented.

Likewise, on the university side, the early experiments suggest heavy involvement by graduate students and staff, some engagement on the part of young, untenured faculty, little regular participation by senior faculty in education, and almost no involvement by liberal arts and sciences faculty. Prerequisite standards here should signal the firm intention that tenured faculty of the university are engaged in PDS activity on some regular basis. Universities can work out many arrangements, including rotating assignments, but this must be a resource commitment for the PDS enterprise. Again, no external standard is available to specify the level and degree of participation, so these must be codified gradually and inductively.

Fourth are governance arrangements. The PDS should be able to document that working agreements are in place regarding decision making about the PDS and participation in the process. Rights, responsibilities, rules, and roles should be specified, not to the nth degree, but with enough detail to supply guidance. Parties to the agreement may include representatives of the district, the school principal and teachers, the teacher union, and university representatives. Governance arrangements may specify decision making committees and their composition, strategic-planning processes, policy development, dispute-resolution procedures, and others. Many PDSs begin quite informally on the basis of individual contacts among faculty of the cooperating organizations; however, if the PDS is to become institutionalized, then increasing formality in governance will be necessary.

PDS Mission and Goals

Self-study typically begins with an institutional mission and goals statement as a basis for assessing progress. For the PDS the mission concentrates primarily on the

shared work of professional education and inquiry, although this may overlap with broader school planning activity. Mission and goals are not standards, but they are integral to the standards-setting process. Guidance to schools may supply specifications about the content and character of the mission statement and supporting goals together with criteria for evaluating this aspect of the PDS.

The scope of the mission is an important consideration. First, of course, the mission must focus on student learning, with attention both to the quality of learning and to equity considerations in extending learning to a diverse student population. The mission then should encompass the education of novice educators; the continuing education of school staff, particularly around PDS-related responsibilities; and the conduct of improvement-oriented, collaborative inquiry—especially research by teachers on their own practices. Within this mix the question arises whether the PDS should be a site for the education not only of teachers but also of guidance counselors, administrators, social workers, school nurses, and other personnel. What seems prudent at present is not to require such a range but to explicitly encourage in many PDSs experimentation with multiple internships and their coordination. The balance here lies between the productive use of the PDS as a professional education site and the danger of overwhelming a school with an overly complex agenda, particularly at the start. Planning cycles may be multi-year to encourage long-cycle goal setting according to strategic plans that indicate how a PDS will progressively pursue its mission.

Reviewers will also establish criteria of various kinds for mission and goals. For example, are they sufficiently specific in supplying operational guidance? Are they thorough in addressing key aspects of the PDS agenda? Do they account for central aspects of school context? Do they identify and address school problems in a forthright manner? Do the goals evolve from year to year to reflect development and to respond to changing conditions? Central guidance on mission and goals, then, takes the form of specifications for these statements and criteria for their evaluation.

An emergent issue in many PDSs today is coordination among initiatives. The school may include a general improvement committee, often in response to state or district policy; a PDS coordinating or planning committee; and several other governing bodies associated with such reforms as the Accelerated Schools Program or the Coalition of Essential Schools. School leadership in such cases is responsible for "coordinating the coordinators" to avoid the ill effects of fragmentation. School examiners will want to attend to this aspect of school functioning as they scrutinize the mission statement in relation to the school as a whole.

Quality Assurance Processes

This category for standards follows the commitment of a PDS to engage in processes of continuous improvement. Standards warrant that a school has methods in place for tracking progress toward program goals and objectives. The origin of this commitment is the total quality management (TQM) movement, which emphasizes the regular use of quantitative indicators to gauge ongoing quality of production processes with an eye to continuous improvement. Although the specific practices of TQM need not become part of PDS standards-setting, the general principle is worth observing.

Central guidance on quality assurance processes would specify a set of content categories together with criteria or principles for judging the adequacy of responses in each. The general approach is to specify the essential processes within a PDS that must

be managed well if mission and goals are to be fulfilled, then examine these on the basis of evidence that can be presented through documentation and site visits. Certainly quality assurance processes must be in place around basic goals of student learning. Additionally for the PDS, three core areas are important: learning professional practice, continuing professional development, and conducting improvement-oriented inquiry. Each area requires a more fine-grained breakdown for standards derived from research, exemplary practice, and consensus of relevant professional bodies.

Learning professional practice, for example, might include categories such as these:

- Co-planning and revising the curriculum of professional study.
- Evaluating progress of interns and making formative and summative decisions about them.
- Placing interns with teachers to ensure a good match.
- Preparing school-based practitioners for such new roles as mentor and master teacher.
- Co-supervising interns and practice teachers.
- Creating shared understandings among school-university faculty about central program themes and commitments.
- Studying professional pedagogy and supervision to make improvements.
- Coordinating the various aspects of the professional studies to ensure continuity and reinforcement of learning experiences.

For each category, principles based on research and professional judgment would be established. For example, with respect to the work of mentor teachers, principles of good practice, derived from research on mentoring, might include the following:[3]

- For mentoring to be effective, it must be connected to a vision of good teaching.
- For mentoring to be effective, it must be informed by an understanding of learning to teach.
- Mentoring is more than a social role; it is also a professional practice.
- Mentors need time to mentor and opportunities to learn to mentor.

These and related principles could be unpacked further and explored in particular contexts, but they begin to illustrate, around particular aspects of professional education, what quality assurance standards might comprise.

Likewise, an illustrative set of categories for improvement-oriented inquiry might be the following:

- Developing a mutual inquiry agenda among school and university faculty that identifies significant questions and issues.
- Sharing inquiry results within a community of practice.
- Enhancing the inquiry skills of school-based practitioners.
- Using the results of inquiry to guide educational improvement.
- Scrutinizing inquiry results according to methodological standards of good practice.

- Translating inquiry results into tools and practices for use in school and classroom.

The expectation is that PDSs will consult the best professional guidance in creating their standards, with regard both to schoolwide processes and to sub-processes around central aspects of school mission and function. External standards or principles of good practice are available as a reference point in at least some areas. For example, the National Staff Development Council has established a set of principles for continuing professional development that can serve as a starting point in this area, together with a review of available research findings on effective professional development practices.

The general approach, then, is to develop a set of principles and criteria for best practice in these three core areas on the basis of careful reviews of the available research and consultation with relevant professional bodies that have developed principles of good practice. These standards become the basis for local dialogue and development that review teams may examine.

The School and the University as a Learning Community

In addition to quality assurance processes organized around the core of the PDS mission, an external review team would want to examine the whole school and the university as a context. The focal concern is the PDS mission—its resources, processes, and outcomes—but some attention to the school and the university as a learning community is needed. There is a subtle but important distinction here, however. PDS standards are not the same as school accreditation standards. They should not encompass all aspects of school or university functioning at a close level of detail. At the same time, the school and the university serve as an important context for the professional learning that is provided there. It would make little sense to warrant a PDS that attended relatively well to core mission issues but otherwise operated within a poor school or university. Consequently, PDS standards-setting must take account of overall school and university quality, but in terms of its impact on the core PDS mission. In practice, this balance will be difficult to maintain, a tension for standards setters to wrestle with, but something along these lines appears necessary.

A school review team might want to examine four broad areas of school-university functioning as an overall context for PDS activity. First, *school-university climate* includes attention to such basic issues as safety, security, and discipline and to the quality of relationships among adults and children. Next, *professional community* includes collegial interactions; school-embedded opportunities to learn; joint planning and work on curriculum, assessment, and instruction; teacher leadership; access to outside resources and perspectives; and others. Third, *school-community relations* encompass ways that the school and the university engage parents in support of children's learning and development, coordinate services to children with special needs, draw on community resources for learning, and others. Finally, the *school program* is a broad category that includes attention in the school and the university to the curriculum and extra-curriculum, the structural regularities of the school around time use and scheduling, grouping practices, and related matters.

To reiterate, these broad areas of school-university functioning are not a focal concern for PDS standards but rather are a context that influences the PDS mission and so must be examined. Problem sensing and finding in these areas are important

aspects of an effective school, and the standards process should have means to explore how a PDS goes about improving itself in basic terms.

Learning and Development Outcomes

Finally, each PDS should be able to demonstrate what results it is achieving and how it goes about examining its results. From a public perspective, the core question, that has no firm answer as yet asks, what is the evidence that PDS experiences produce first-rate learning for students, beginning teachers, and educators? It is vitally important to the future of the PDS movement to begin collecting data in response to this fundamental question, and the standards-setting process should serve as a stimulus.

Here is another developmental issue to be sure because the assessment of learning is undergoing significant change today. Traditional measures likely will continue in use, but many schools are experimenting with performance-based assessment and other means. Likewise, ways to assess learning to teach are only beginning to emerge. An important commitment of the PDSs must be to create methods for gauging "what teachers learn and learn how to do" and to implement these within the context of the teacher preparation program, including experiences in PDSs. Performance assessment is one promising avenue to explore, and individual schools will want to experiment with a variety of methods tailored to program goals and objectives. The external review team, then, will ask a three-part question: What do you want novice teachers to learn? Why do you believe that this is the most important learning within the overall demands placed on schools and universities? How do you determine your success in promoting the desired learning among your students?

This approach frames outcome assessment as relative to locally determined mission and goals. External standards, however, would specify at least in broad outline the content categories of learning. PDSs would need to consult state and national goals, district guidance, and the learning objectives put forth by professional bodies, especially in the disciplines. Around professional learning, the continuum linking standards of the Interstate New Teachers Assessment and Support Consortium (INTASC) to those of the NBPTS is the logical starting point. The assessment practices created by the INTASC project and the NBPTS also provide methods that may be employed within the teacher education program and the PDS internship. The expectation is that PDSs would examine these standards, adapting them to the local context, then develop measures of student and professional learning within this external-internal framework.

Stakes for Standards-Setting

Finally, standards-setting must address the issue of stakes or consequences. Good reasons exist for developing PDS standards, but institutions will have little motivation to seek external evaluation. If standards are voluntary, then they will not reach or cover many PDSs. Yet mandatory standards, associated with school or university accreditation, for example, appear premature in light of the untested nature of the PDS. How should standards-setters deal with the dilemma of stakes?

This is a lesser-of-two-evils problem. For the foreseeable future, educators will be experimenting with practices in PDSs, including ways to document and evaluate

their effects on school and university student learning. In this period of experimentation and innovation, standards should be voluntary and formative, aimed primarily at assisting the emergence and sharing of good practice. The alternative is to establish minimum standards for the PDS and attempt to enforce these through accreditation processes, a move that few would regard as either legitimate or helpful.

However, standards may be promoted in various ways. Accrediting agencies can include PDSs as a voluntary aspect of general accreditation, encouraging schools of education to submit their PDS work as part of their overall mission and function. Another option is to encourage PDS development through a recognition program that rewards good practice rather than sanction poor or unacceptable practice. A recognition program would establish rewards of various kinds that acknowledge exemplary work judged against common standards or principles. The Malcolm Baldrige award is an example of this approach, but a recognition program might issue multiple awards annually rather than only one or two. Yet another option is to imitate the National Board for Professional Teaching Standards by creating an institutional analog for the advanced certification of teachers. Schools that volunteer to become "certified" PDSs might undergo rigorous scrutiny that would result in a certificate of merit that eventually might attract rewards and incentives of various kinds. Such a process would highlight advanced or exemplary practice in PDS development from which other schools might learn. Processes of this kind would supply modest motivation to institutions without introducing the distortions of mandatory regulations or requirements. What seems prudent at the present juncture is to create incentives of various kinds to participate in standards setting rather than rely on sanctions and a regulatory approach.

Conclusion

Standards-setting for professional development schools should be conceived as an opportunity to stimulate the growth of these new institutions and to promote the necessary changes in the partner institutions. If managed well, the standards-setting process can serve a learning and change agenda, which is the proper aspiration for the PDS. The balancing act, as always, is to introduce external standards of various kinds grounded in professional consensus and empirical results that local schools may use to develop their own practices. In this spirit, standards-setting may become a positive force in the growth of the PDS.

Notes

[1] This paper takes the position that professional development schools are partnerships between a university and a P-12 school. PDSs, however, may arise within schools as part of district efforts to induct new teachers, to promote professional development, or to encourage inquiry. Partners other than universities also may become involved. As the arguments of this paper make clear, the PDS is a social invention intended to improve professional education as a shared function between the university and the school. PDSs may serve other functions, but this is their primary one and requires a school-university partnership.

[2] Marsha Levine (personal communication) suggested these models; under her direction, the NCATE project to establish PDS standards will be exploring these and other models for leads.

[3] These principles are based on the Learning From Mentors research project of the National Center for Research on Teacher Learning. Standards-setters would want to review the full body of research on mentoring to extend, deepen, and amplify principles such as these.

References

Ancess, J. (1994, April). *School learning from the school quality review: the Highland Elementary School one year after their SQR.* Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

Ball, D. (in press). Teacher learning and the mathematics reforms: What do we think we know and what do we need to learn? *Phi Delta Kappan.*

Cohen, D. (1995). What standards for national standards? *Phi Delta Kappan, 76*(10), 751-57.

Darling-Hammond, L. (1993). Reframing the school reform agenda: Developing capacity for school transformation. *Phi Delta Kappan, 74* (10), 752-761.

Darling-Hammond, L. (Ed.). (1994). *Professional development schools. Schools for developing a profession.* New York: Teachers College Press.

Eisner, E. (1995). Standards for American schools: Help or hindrance? *Phi Delta Kappan, 76* (10), 758-764.

Elmore, R. (1983). Complexity and control: What legislators and administrators can do about implementing public policy. In L. Shulman & G. Sykes (Eds.), *Handbook of teaching and policy* (pp. 342-369). New York: Longman.

Ewell, P. (1992). Outcomes assessment, institutional effectiveness, and accreditation: A conceptual exploration. In *Accreditation, assessment, and institutional effectiveness* (pp. 1-17). Washington, DC: Council on Postsecondary Accreditation.

Goodlad, J. (1990). *Teachers for our nation's schools.* San Francisco: Jossey-Bass.

Goodlad, J. (1994). *Educational renewal. Better schools, better teachers.* San Francisco: Jossey-Bass.

Holmes Group. (1995). *Tomorrow's schools of education.* East Lansing, MI: Author.

Kagan, S. (1993). *Laura and Jim and what they taught me about the gap between educational theory and practice.* Albany: State University of New York Press.

Little, J. W. (1982). Norms of collegiality and experimentation: Workplace conditions of school success. *American Educational Research Journal, 19* (3), 325-340.

McLaughlin, M., & Talbert, J. (1993). Contexts that matter for teaching and learning. Strategic opportunities for meeting the nation's education goals. Palo Alto, CA: Stanford University, Center for Research on the Context of Secondary School Teaching.

Sarason, S. (1982). *The culture of the school and the problem of change* (2nd ed.). Boston: Allyn & Bacon.

Schlechty, P. (1990). *Reform in teacher education. A sociological view*. Washington, DC: American Association of Colleges for Teacher Education.

Schon, D. (1971). *Beyond the stable state*. New York: W. W. Norton.

Siskin, L. (1991). Departments as different worlds: Subject subcultures in secondary schools. *Educational Administration Quarterly, 27* (2), 134-160.

Theobald, N. (1991). Staffing, financing, and governing professional development schools. *Educational Evaluation and Policy Analysis, 13* (1), 87-101.

Professional Development Schools

A Literature Review

Lee Teitel

By the summer of 1995, the ERIC database listed almost 200 references to professional development schools (PDSs), including journal articles, reports, conference papers, and a few edited books. What follows is an attempt to sort through that broad collection of literature, with a focus on what has been written that can help inform the PDS Standards Project of the National Council for Accreditation of Teacher Education. This literature review closely follows the format of the rest of the PDS Standards Project, using, for instance, the set of goals and commitments defined elsewhere as the framework for collecting, organizing, and reporting the literature.

The review begins with a brief overview of the literature, painting in broad strokes the kinds and categories of writing available. This is followed by a short section on context, which broadly describes other literatures in which PDS work is embedded—literatures on school-university collaboration, lab schools, and school reform. A third section looks briefly at the principles, beliefs, and goals for PDSs that emerge in the literature—what has been published by various networks, how they differ, and how they converge.

The fourth section of the literature review focuses on program characteristics of PDSs and is organized under each of the four characteristics identified by the PDS Standards Project: supporting student learning, teacher education, professional development, and research and inquiry into practice. This section provides as much specificity as possible about actual practice associated with the implementation of particular aspects of a PDS.

The fifth section addresses development and implementation and draws on references about structural and cultural changes involving governance, financing, institutionalization, and so forth. This portion of the review is shaped in part by the "Core Commitments" referred to in the standards project: shared views of teaching and student-centered learning, simultaneous renewal, parity, and issues of equity. It also explores some of the developmental or stages theories that have been applied to PDSs.

The sixth and final section reviews what has been written about PDS effectiveness, including both direct PDS evaluations and related studies that might shed light on measures to assess the impacts of PDSs.

I. Overview of the Literature

To provide an overview of the literature available on PDSs, Lisa Christie of the PDS Standards Project categorized almost 200 references drawn from an ERIC search and other sources, on the basis of reviews of the abstracts. She found 86 descriptive studies or documentation works, 41 works classified as policy or opinion, 18 surveys

or evaluations, 18 case studies, 5 reports based on focus groups or interviews, 15 books, and 19 references and other resources, such as handbooks.

The works that are classified as policy or opinion range from critiques of the first Holmes Group report (Cuban, 1987) to pieces on alternative certification (Haberman, 1992) to advocacy pieces about the value of PDSs in particular preparation areas (Forrest, 1993). In the publications that describe the mission and goals of a PDS, there does appear to be a convergence on student learning, in-service and preservice teacher development, and inquiry. This convergence will be elaborated in the third section of this paper.

The bulk of the literature—the descriptive studies and documentation reports—range in quality and focus quite dramatically. A small sampling illustrates the range of topics—many of the descriptive papers are about PDSs in one subject area or another: child care (Barbour & Bersani, 1991), social studies (Diem, 1992), mathematics (Gross, 1993), or science education (Labaree, 1991). Some of these are simple reports of early-stage PDS start-ups; others, like Sagmiller and Gehrke (1992) are detailed and reflective ethnographic studies. Most of the documentation studies describe PDSs that focus on preservice and in-service education, with fewer reports of PDSs giving substantial attention to the improved student learning outcomes and the inquiry process that are also usually cited as part of the mission of PDSs. These distinctions will be detailed further in the fourth and fifth sections of this paper.

More than twenty reports are categorized as surveys or evaluation or focus group interviews; however, this area is still very thin on substance. Although a few good pieces describe how an evaluation of a PDS should be done (Sirotnik, 1988; Clark, 1995a; Torres, 1992) little in the literature approaches any kind of comprehensive review of PDS effectiveness. What is available will be elaborated in the sixth section of this paper.

Several journals have put out PDS theme issues: *Teaching Education* (Spring, 1992), *Contemporary Education* (Summer 1993), *Journal of Teacher Education* (January-February 1992 & September-October 1994), and *Educational Policy* (March 1993). *Metropolitan Universities* (Summer 1991) focused on collaborations between universities and schools and had several PDS articles. Several edited books have been published, including Levine (1992), Darling-Hammond (1994a), Osguthorpe and others (1995), Petrie (1995), and Levine and Trachtman (1997). Other relevant books include the Holmes Group reports (1986, 1990, 1995), as well as those providing background on school-university partnerships more generally (Sirotnik & Goodlad, 1988). Articles in the journal theme issues, and chapters in the edited books, provide rich resources on PDSs and are woven throughout this report.

The references include three PDS handbooks (Teitel & Del Prete, 1995; Woloszek & Davis, 1992; East Longmeadow School District, 1991), directories of PDSs (Clark, 1992; Abdal-Haqq, 1992b, 1995), as well as annotated bibliographies (Abdal-Haqq, 1992a) and a comprehensive review of the PDS literature (Book, 1996).

An overview of the PDS literature would not be complete without an acknowledgment of a problem that underlies any broad analysis of its scope: with no clear criteria established, it is hard to know which of these hundreds of articles pertain to more developed PDSs, which to less, and which to institutions that, in truth, are PDSs in name only. In her review of the literature for the *Handbook of Research on Teacher Education* (1996), Book identifies this problem:

> The operationalization of what is meant by a professional development school continues to plague researchers' ability to clearly explain what impact the activities of a PDS are having on teaching, learning, school organization, and teacher education. As researchers and teacher educators, we are often at a loss to define when a school is actually a professional development school. Is it when the university and school district label it a PDS or make a commitment to create one? Is it when the criteria specified by the Holmes Group or other organization or Frank Murray [1993] are met? Is it when there is evidence of the interacting effects of new forms of teaching on higher levels of learning?...How sophisticated or developed must the relations between goals and outcomes be to acknowledge a school as a PDS? (p. 204)

The lack of clear criteria does not affect just researchers who study professional development schools, but anyone who works in, or advocates for, a PDS. This literature review is written in the hopes that it will contribute to the work of the NCATE PDS Standards Project in helping establish definitions and standards that can be agreed upon by the educational community.

II. Context

The PDS literature refers to, and grows out of, several other strands of research and publication. Some of them overlap, but a few key areas are outlined below.

School-University Collaboration

Professional development schools can be seen as special cases of school-university collaboration. Schlechty (1988), Goodlad (1988), and De Bevoise (1986) provide background information on partnership formation that is essential for any thoughtful work in formation of a PDS. In one example of how this sort of background can be used, Pinnegar and Smith (1992) present an overview and a history of collaboration between schools and universities to help inform the process used by Western Michigan University in starting to set up its PDS partnerships.

Stoddart (1993) sees PDSs as a way to resolve the tensions historically existing between schools and universities. She notes that often new approaches to teaching that develop from research conducted by universities (like constructivist learning) have had little impact on classrooms, especially when presented to classroom teachers in non-constructivist ways. PDSs can be creative ways to bridge the gap and avoid the theory-practice dichotomy.

School Reform

Levine (1992) describes how the work of John Dewey and the progressive movement shaped Abraham Flexner's advocacy of the teaching hospital in the reform of medical education. This has come full circle, Levine notes, with the current use of the teaching hospital as a model for designing professional development schools. Several authors, including Klaumeier (1990), trace the historical roots of school reform in the last four decades, connecting PDSs as an evolutionary response to reform reports like *A Nation at Risk* of the early 1980s. Reck (1992)

sees the development of the professional school of education as rooted in reforms of the past, with the need to develop clinical approaches to teacher preparation and involve arts and science faculty as well as community groups and other stakeholders. Sewall and others (1995) describe PDSs as a logical coalition building between schools and universities, in part as a defensive reaction to the perception of low public esteem experienced by schools and teacher preparation institutions. Others see an eroding public support for university budgets contributing to their willingness to link themselves to school reform issues that taxpayers care about (Frazier, 1994).

Foundation Support for School Reform

Many professional development schools got their start through the support of foundations like EXXON and Ford, so in a sense, the PDS movement can be seen as rooted in this sub-area of school reform. PDSs make sense to funders because they bring multiple players to the table at the same time. After an evaluation of its previous support for isolated school reforms, one foundation director's conclusion was the "realization that progress could be made only if the problem were attacked at both ends: in the classroom, where teachers and students interacted, and in the universities, where future teachers were preparing for their careers" (Richardson Foundation, 1993, p. v.). For the Ford Foundation, the importance of preservice and in-service preparation led to its support of PDSs; Ford also developed tie-ins with colleges, districts, and teacher organizations like AACTE (Anderson, 1993). John Dunlop, in a report for the Gheens Foundation (Kyle, 1993), points out how the potential for coherent systemic change makes PDSs that much more appealing to funders.

Teacher Education

Professional development schools can also be seen as growing out of, or in response to, the alternative certification movement (Dixon & Ishler, 1992a). They represent a response that involves universities but also tries to put some credibility back into teacher preparation in the face of the public lack of confidence that has led 41 states to provide some kind of alternative certification route (Frazier, 1994). Williams (1993) sees PDSs as a proactive response that teacher preparation programs can take to avoid having to react to increased regulation from legislatures.

Laboratory schools represent another background strand for PDSs. Although Levin (1990) lists the differences between PDSs and lab school approaches, and the Holmes Group specifically disassociates itself from lab schools (Murray, 1993), Creek (1995) argues that there are close enough connections to make him wonder why the Holmes Group fails to "acknowledge the origins of their newly postulated ideas" (p. 247). MacNaughton and Johns (1993) resolve the conflict by pointing to PDSs as evolutionary descendants of the lab school, part of a continuing effort to improve the connection between university-based and school-based teacher preparation components.

Other roots of PDSs can be found in the evolution of the field experience and its supervision. PDSs can be stimulated by dissatisfaction with the loose connection between the university and what is generally seen as the most important part of the teacher education experience—student teaching. The history of the distrustful, often adversarial relationship between supervisors and classroom teachers serves as an important backdrop to the role changes and reconfigurations of PDSs (Ellsworth & Albers, 1995).

Professionalization of Teaching

PDSs are strongly rooted in the movement to professionalize teaching. They can play an important role in the development of a knowledge base for teachers (Pugasch, 1991) and in reconceptualizing the roles of teacher leaders (Collinson, 1994). Darling-Hammond (1994b) emphasizes the crucial role that PDSs can play as the gateway to developing a profession of teaching:

> PDSs struggle against traditional school norms as they offer the possibility for socializing new teachers to a different set of expectations about practice within and outside the boundaries of their classrooms. ... If PDSs become the doorways that all new teachers pass through as they launch their careers, they can transform the culture of teaching and the expectations for collaboration along with the nature of teaching and learning in individual classrooms. (pp. 8-9)

These issues of professionalization apply both to the induction of new teachers and to the development of experienced teachers (Lieberman & Miller, 1992) and are part of an emerging conceptionalization of what it means to be a teacher. Arthur Wise of NCATE defines his vision of a professional teacher:

> Teachers will be held accountable for responsible professional practice when they will be expected to know their subject matter and the professional and pedagogical bases of effective teaching, and to apply that knowledge in an ethical manner to the development of students in their charge. Teaching will become a profession in which one is not authorized to practice until he or she has adequate professional preparation. (quoted in Mays & Pollard, 1993, p. 5)

Darling-Hammond (1992) defines what professional accountability for teachers might look like, anchoring her discussion in a review of the advantages and limits of other forms of accountability: legal, political, bureaucratic, and market-driven. She identifies professional development schools as the places best suited to provide accountability for professional teachers, "by ensuring that they have the tools to apply theory in practice and by socializing them to professional norms and ethics" (p. 91).

Arguing that professions are characterized by a knowledge base, a moral framework, and a collegial structure, Levine (1992) summarizes research on teacher education as well as work in other professions to define the current status of the teaching profession on these three elements. She concludes that regular schools are ill-suited to provide the institutional climate and support for professionalization. Furthermore, the norms of the university and the apprenticeship approach to clinical practice taken by most teacher education programs do not support an emphasis on reflection on one's own practice required for the preparation of professionals in PDSs. She builds on these themes to articulate a vision for professional practice schools in which the collaborative input of university, school, and district can lead to clinical practice that supports professionalism.

Closely connected to the professionalization of teaching is the standards movement. Frazier (1994) describes the choice that the Education Commission of the States faced between the standards and assessment approach advocated by NCATE, the

National Board for Professional Teaching Standards, and others, and the simultaneous renewal approach of the National Center for Educational Renewal. He concludes by discussing the way in which the two approaches are complementary, suggesting that schools and teaching will best be served if the simultaneous renewal activities of PDSs go on concurrently with the development and refinement of assessment and standards. Sykes (1997) takes this argument a step further by suggesting that the PDS is uniquely suited to serve as a site for the integration of the various standards being produced by groups like the National Board and content area standards like those of the National Council of Teachers of Mathematics.

III. Principles, Beliefs, Goals

The PDS movement has been promoted by a range of organizations: the Holmes Group (1986, 1990, 1995), the Carnegie Forum on Education and the Economy (Brainard, 1989), the National Network for Education Renewal (Goodlad, 1994), the American Federation of Teachers (Levine, 1992), the National Educational Association (Robinson & Darling-Hammond, 1994) and the Ford Foundation (Anderson, 1993).

Although the wording differs, and the emphasis and focus differ among PDS advocates, there is a strong convergence around four goals: the improvement of student learning, the preparation of educators, the professional development of educators, and research and inquiry into improving practice. For instance, the Holmes Group (1986, p. 56) sees PDSs as places in which teachers, administrators, and university faculty could work together through "(1) mutual deliberation on problems of student learning, and their possible solutions; (2) shared teaching in the university and the schools; (3) collaborative research on the problems of educational practice; and (4) cooperative supervision of prospective teachers and administrators."

Similar goals are articulated for the "partner schools" of the National Network for Educational Renewal:

- *Educator preparation*: collaboration between partners to ensure that those entering the education profession are prepared to serve all students effectively;
- *Professional development*: collaboration between partners to provide opportunities for teachers to strengthen their ability to contribute to the students they serve;
- *Curriculum development*: collaboration between partners to improve the education and school experiences of all students; and
- *Research and inquiry*: collaboration between partners to raise questions and conduct research that will promote educational renewal at both the school and the university (Osguthorpe, Harris, Harris, & Black, 1995, p. 5).

Although concurring with most of these goals, others involved in PDSs sometimes add additional goals. Some include specifics like developing literacy and numeracy for children (Richardson, 1993) or preparing teachers for the inner city (Stallings et al., 1990) or for working with diverse student populations (Zeichner & Miller, 1997).

The PDS Steering Committee of the National Center for Restructuring Education, Schools, and Teaching serves as a network of networks, pulling together representatives of each of the networks named above (plus statewide networks, like

the Michigan Partnership for New Education and the Massachusetts PDS Steering Committee) to help develop common principles. Their work (see "Vision Statement" in NCREST, 1993) helps underscore the convergence of the goals of these different organizations and make more explicit what the goals are for PDSs.

In reviewing the PDS literature, two things stand out in relation to goals and purposes, especially in thinking about standards. First, because of the lack of a standardized definition, those writing about their own PDSs try to use other published definitions of PDSs to justify that their partnership is indeed a PDS. For instance, Benton and Richardson (1993) refer to meeting the Michigan Partnership for New Education guidelines for their Mississippi partnership. There are numerous references to the Holmes Group guidelines, including some from non-Holmes institutions; Schack and Overturf (1994) refer to the NCREST (1993) statement of principles as a way to document that their partnership really meets a PDS's commitments.

A second broad issue concerns the "all or none" debate. Throughout the literature is a strong sense of the interrelatedness of the different goals of a PDS. Murray (1993), of the Holmes Group, develops in more detail the Holmes criteria for a PDS and argues that the "goals are interconnected and none can be achieved without the others" (pp. 70-71). Yet in the real world, the Holmes Group (1990) notes that probably not one partnership with all features exists. Brainard (1989) constructed a list of fourteen criteria and after reviewing the extant PDSs (both Holmes Group and others) concluded that "none of the projects included in this study appears to meet all or even most of the fourteen criteria" (p. 49). More recently, Osguthorpe and his colleagues (1995) report that in the National Network for Educational Renewal, no partner school can claim to excel in all four basic areas. The importance of fostering the interconnections among the several goals of PDSs as well as this apparent lack of connection between the ideal and the real create some challenging questions for any standards-setting process: should the standards used to assess PDSs be "all or none" so that only the partnerships with well-developed programs in all four areas are considered PDSs? Should standards allow a more flexible mix of activities and consider as PDSs those partnerships that address only two or three of the areas on the PDS agenda? Should there be some sort of expectation that a partnership will be developing more in certain other areas in the future?

IV. Program Characteristics

This section, focusing on program characteristics of PDSs, is organized around each of the four goals identified by the PDS Standards Project: improvement of student learning, teacher education, professional development, and research and inquiry into practice. Each subsection has three parts: some key characteristics and philosophical tenets, examples of specific activities associated with implementing that particular aspect of being a PDS, and summary comments and questions that emerge from the review of the literature.

Improvement of Student Learning

Key characteristics and philosophical underpinnings

The NCREST PDS Vision Statement calls for "centering schools on learners and learning" in a long list of ways that includes—

- an unalterable commitment that all children can and do learn;
- a commitment to inclusive, adaptive approaches to children and their learning and the full participation of all learners.in expanded educational opportunities, with respectful consideration of gender, class, race, and culture;
- continual practical and reflective work in developing curriculum and alternative teaching strategies;
- classrooms and schools based on the realization that teaching and learning are reciprocal processes demanding active work on genuine tasks that are meaning fully assessed; and
- curriculum and teaching that support multiple learning strategies, appropriate and varied assessment, and genuine accountability for student growth, development and learning (NCREST, 1993, pp. 3-4).

According to one of the architects of the Holmes Group approach, "[a]part from the PDS design itself, the Holmes Group and others are not advocating a particular pedagogical model or curriculum scope and sequence" (Murray, 1993, p. 62). Nonetheless, the clearly expressed beliefs that all children can learn, and their commitment to "teaching and learning for understanding" suggest the possibility that this "may well require a radical revision of the school's curriculum and instruction" (Holmes Group, 1990, p. 7). For many scholars and activists in PDSs, the calls for interactive teaching with a real push for higher-order thinking skills for all children lead inevitably to a constructivist approach. For example, Stoddart (1993) sees PDSs as a key to resolving conflict between university beliefs in constructivism and teacher resistance to it (although others may argue that it works the other way as well).

Specific examples and representative activities

Kimball and others (1995) provide five examples of how various approaches used by partnerships in the NNER are enhancing student learning. These ranged from classroom changes to school- and district-wide approaches:

Preservice teachers

These included the individual learning experiences that P-12 students had with interns, the continuity that interns offer versus substitutes when regular teachers are involved with other activities, and the effect of units or special projects set up by the intern.

Classroom teaching teams

When interns and classroom teachers collaboratively teach, the mix of perspectives and approaches can improve the teaching of both and create an enhanced learning environment for students.

Additional partners

When a school-university steering committee initiates a districtwide survey about the teaching of science and includes parents, students, local museums, administrators, and faculty at the school and the university, the combined resources and energy focused can improve science teaching and learning districtwide.

Multifaceted collaboration

Broader collaborations with arts and science faculty in the university, along with teacher educators and teachers, create opportunities to improve the teaching of regular science courses, science methods courses, and science classes at the partner school.

Meaningful assessment

A variety of joint PDS efforts at improving the assessment of student work lead to increased opportunities for students to gain experience in self-assessment as well as for preservice and in-service faculty to gain understanding of student learning (summarized from Kimball et al., 1995, pp. 25-41).

Other examples of the way in which schools support student learning are reported in the literature: Changes at Fairdale High School (Kentucky) include revisions of mathematics curricula to use National Council of Teachers of Mathematics standards, interdisciplinary thematic teams, block scheduling, and, overall, less lecturing and more student work in groups with teachers as coaches (Whitford, 1994). Each year, preservice teachers and faculty from Teachers College Columbia and Intermediate School 44 (New York) enact the "January Experience," which combines interdisciplinary curriculum developed by multidisciplinary teams of experienced and student teachers during the college's intercession. Lythcott and Schwartz (1994) describe the multiple levels of impact that this has had on student teachers, on experienced teachers, and especially on children, who loved the new classroom organization, the interdisciplinary work, and the multiple adults in their classes. McCarthy and Peterson (1993) provide detailed accounts of how teachers in PDSs modify their practice to better meet the learning needs of children. Using case study comparisons, they note the circumstances and the features of a PDS that support "teaching for understanding."

Summary comments and questions

Because of the context for the formation of many PDSs, it is often difficult to say with complete certainty that the establishment of a PDS led to improved approaches to student learning. Many changes either predate a PDS or run concurrent with it, as in the Washington (state) middle school described by Grossman (1994), where innovative programs in outcomes-based education and Glasser's control theory paralleled the start-up of the PDS. Changes in approaches to supporting student learning can also be byproducts of other PDS activities; Zeichner and Miller (1997) describe changes that came about as an offshoot of a social action project that was put into place for the student teachers at the PDS.

PDSs also operate with little or no apparent change in approaches to student learning. Although some aspect of school renewal or improvement of student learning is mentioned as part of the goal or purpose statements in most articles found in the PDS literature, the issue is often not returned to in the substance of the articles. Kimball and others (1995), writing about the NNER partner schools, warn that although

> the goal of improving students' learning experiences must take precedence over other aspects of partnership function,...[t]he means to effective partnership can easily become ends in the themselves. For example, the energy for change in schools may become focused only on improving working conditions for teachers, establishing more collaborative decision making structures, or creating more flexible schedules, all of which can be means to the end of the learning but should not be ends in themselves. Administrative practice can change without passing the advantage to the classroom. (p. 24)

Shen (1994) notes the disturbing possibility that when a school becomes a professional development school, its focus on improving student learning might diminish rather than increase. Teachers interviewed by Shen report feeling that being selected as a PDS indicated that their school was already exemplary; most of the emphasis in their school, therefore, should be on teacher education and professional development.

Teacher Education

Key characteristics and philosophical underpinnings

Some sort of enhanced experience for preservice educators is at the heart of most, or all, PDSs. Philosophically this difference from traditional teacher preparation represents an important part of the professionalization of teaching (Darling-Hammond, 1994). Part of the professionalization model implies that teachers would be socialized into a different conception of teaching and of schools. These philosophical beliefs have been the basis for many of the organizational and structural changes in student teaching common to PDSs. Frequent references are made in the literature to the medical model, with many, if not most, PDSs reporting that they link focused commitment to preservice education with a yearlong internship. Some approaches follow the medical model further into induction, with a multi-year follow-up residency (Lakebrink, 1991). Often student teachers are assigned to more than one cooperating teacher and sometimes to a team; they frequently have broader exposure to other experiences in the school. Zeichner and Miller (1997) sum up these differences:

> The existing literature on SBS [School Based Studies] in PDSs has made it fairly clear that several significant changes are occurring in SBS as they become situated in Professional Development Schools. These include an increase in the amount of time spent by preservice teachers in schools, more planned and purposeful experiences for student teachers, a greater focus on the whole school as the placement site, an increased emphasis on collaboration among teachers and peers, greater access to university supervisors, a greater respect for teacher knowledge and more decision making about the program by school staff, and more access to workshops and seminars on mentoring student teachers for school staff. (pp. 37-38)

Specific examples and representative activities

Student teachers in the Coolidge School-Ana Maria PDS (Shrewsbury, Massachusetts) have a day a week designated a professional development day. As a group they join with their clinical professor and the school-based mentor teachers for a variety of activities based on a particular theme, such as some aspect of curriculum, the teaching-learning process, or classroom management. Activities include prearranged classroom visits along the medical model of "doing the rounds" followed by discussions with the host classroom teacher and other collaborative reflective discussions (Del Prete, 1990). At the University of Massachusetts Amherst–East Longmeadow PDS, student teachers begin with observations and a daylong interview process and (if accepted by the site) go through a carefully structured transition into

their teaching roles. This includes a two-day seminar with the participating university and school faculty before their placement, regular sessions during the semester, and a 1-day retreat at the end (Seidman, 1991).

Preservice teachers are assigned to four-person teams for a yearlong internship in the Teaching and Learning Collaborative (Brookline/Boston). They are involved in all aspects of planning and instruction for the entire school year, in effect serving as "junior" faculty (Larkin & Troen, 1995). In Fairdale High School (Kentucky), teacher candidates get welcomed into all aspects of school life by developing relationships with principals, special education teachers, secretaries, and other teachers on site-based decision-making teams. Teacher candidates work on projects that overlap and support the school's restructuring agenda, getting immersed in the real work of the school (Fischetti, 1994). In the fifth year of their integrated bachelor's/master's program at the University of Connecticut, preservice teachers do an administrative internship rotation with the principal or other school leader and get involved in planning some sort of schoolwide project, in addition to another practice teaching experience (Norlander, Case, Meagher, & Reagan, 1992).

Barnhart and others (1995) provide numerous examples of changes in teacher education in the partner schools of the NNER, pointing out that university and school faculty and administrators need to play different roles in organizing, supervising, modeling, and facilitating teacher education. In one particular organizational model, preservice literacy teachers are in classrooms five mornings a week and participate in a collaboratively taught instruction-discussion session each afternoon. In one of the partner schools, the supervision is changed so that the cooperating teacher, the university professor, and the student teacher take turns teaching, mentoring, and evaluating one another. Modeling is different because it is no longer just the cooperating teacher doing it for the student teacher—it is a three-way "equilateral triangle." Unlike traditional student teaching, discussion and congruence over the teaching approaches to be used occur. Finally, in some programs, student teaching is facilitated by having well-qualified student teachers hired at half salary (thus giving the district money to free up a mentor teacher) while they complete their yearlong internship (summarized from pp. 57-66).

Summary comments and questions

Zeichner and Miller (1997) note that despite the many changes in the field component of teacher education cited above, the allocation of resources has seen very little change. Much of the additional work done by school-based and university-based faculty is on overload, which raises questions about the sustainability of these initiatives.

Changing preservice teacher education is clearly a key element for places calling themselves professional development schools. A concern that emerges from reviewing the literature is that for some, that change seems to be where the PDS starts and ends. For example, the PDS cooperating teachers interviewed by Shen (1994) expressed the view that being a PDS meant year-long student teaching, more cooperating teacher involvement, greater attention to matching, and on-site supervision and assignment to a team. They did not mention improved student learning or research or inquiry into practice. In their review of the historical evolution of field placement options for student teachers, MacNaughton and Johns (1993) begin with the lab school, go to the triad arrangement (cooperating teaching, student teacher, and university supervisor), and then

describe the "center," or cluster site, of student teachers—all are seen as precursors to the PDS. These "centers," some of which have been in operation for twenty years, provide schools with a consistent supply of student teachers, improved communication through formal governance agreements, and opportunities for in-service programs for cooperating teachers. When viewed from this perspective, a close reading of many of the descriptive reports on places calling themselves professional development schools suggests that they may be more accurately called cluster sites or "centers."

Professional Development

Key characteristics and philosophical underpinnings

The philosophical roots of teacher professional development in the PDS are the twin beliefs that teachers are the key to educational renewal and that continuous inquiry into practice is the key to successful teacher development and growth.

Much of the professional development for experienced educators is tied to, and a natural outgrowth of, the three other areas: working to improve student learning, expanded roles in teacher education, and research and inquiry. For school-based faculty, professional development follows from a great expansion of roles, a stretching in new teaching methods, and a broader conceptualization of the role and definition of teacher. Successful involvement with preservice teachers can expand the possibilities for teacher leadership, growth, and professionalism. It requires teachers to crystallize what they know and to articulate that knowledge to novices, but it also has other, further reaching effects. "As teachers become mentors and teacher educators, as they assume greater responsibility for the collective profession, they also become more comfortable with the notion that seeking and leading collective improvements in practice are aspects of a professional role" (Darling-Hammond, Cobb, & Bullmaster, 1995 p. 19).

In addition to specific tasks and the expansion of roles in relation to preservice teachers, according to Lieberman and Miller (1992), PDSs provide a culture of support for other avenues of teacher growth and professional development: teacher study groups, curriculum writing groups, teacher research projects, peer observation, case conferences, program evaluation and documentation, trying out new practices (with collegial support), teacher resource centers, and participation in outside events and organizations. They note several factors about these activities that contribute to teacher development: colleagueship, space and time for teacher inquiry, a focus on learning content in context, and opportunities for leadership and for networking activity that go beyond the bounds of the school.

Part of the philosophical approach in PDSs is that teachers take more responsibility for their own professional development, through involvement in book clubs, presentations and attendance at regional and national conferences, visits to other schools, and provision of workshops to student teachers or other teachers. Indeed, the very idea of professional development is changing in these school-university partnerships. In PDSs, teacher-initiated, flexible, and ongoing workshops frequently replace traditional top-down, mandated, in-service workshops. In early PDSs, university faculty would often conduct these workshops for teachers, but as partnerships have evolved to a greater level of parity and appreciation for what classroom teachers know, typically the classroom teacher's role in organizing and presenting workshops (in some cases to university personnel) has grown (Teitel, 1996).

In theory, professional development in the PDS does not apply only to school-based faculty, but to administrators and to university faculty. For university faculty, the opportunities to work more intensely and in context with preservice and in-service teachers can provide substantial professional development, along with the chance to integrate their teaching and research and to take leadership in shaping the direction of the PDS. Administrators at both institutions are theoretically similarly gaining professional development, although the fact that much less is written about them mirrors the lower priority that this activity has for many. Stevenson (1993) makes the case for the importance of preservice and in-service principal preparation at the PDS; Case and others (1993) highlight the advantages of university administrator involvement.

Specific examples and representative activities

Several specific aspects of working with preservice teachers contributed substantially to the development of experienced teachers at Wells Junior High School's partnership with the University of Southern Maine: a two-day mentor-teacher training session, although not part of the original design, has given teachers a common language to work more effectively with interns; a videotaped observation and coaching process gives teachers feedback on how they are doing as coaches of interns; and the presence of the interns themselves not only provides an influx of new ideas but forces experienced teachers to articulate and reflect on what they do and why (Miller & Silvernail, 1994).

In addition to expanded roles as a mentors, school-based faculty are taking on roles formerly held by university supervisors, which shakes up the triad. Teachers are playing greater roles at the university. For example, teachers in the Teaching and Learning Collaborative are instructors of graduate teacher education courses at Wheelock College; some also serve on the curriculum committees that plan and revise the courses (Larkin & Troen, 1995).

When teachers engage in the work of supporting student learning, they become curriculum developers and curriculum interpreters. Tailoring instruction to meet the needs of students, factoring in the curriculum ideas brought by interns, looking critically together at curricular innovation—all can be transformative professional development experiences. One PDS case study describes this transition over time as teachers began to believe that they could and should start to take more responsibility for what and how they taught: "Instead of feeling that they 'have to finish a basal' or assigning writing topics from the teacher's manual, teachers typically reported that they were making their own decisions about how to use the curriculum" (Jett-Simpson, 1992, p. 14). A tie-in to the participating university and the district professional development center leads in many PDSs to specific content-area professional development of experienced teachers. McCarthy and Peterson (1993) stress the importance of these opportunities to connect teachers to a larger knowledge base in their content areas.

Stoddart (1993) describes a similar experience coming from a collaborative staff development and research model in mathematics. The program combined university co-teaching in the classroom with an action-research model focused on teacher and student understanding of mathematics. The project had an impact on the development of both groups of faculty:

> The university faculty members who came in with a primary emphasis on theory and research were forced to look closely at themselves as teachers and examine the difficulties of translating theory into practice. They began to emerge more strongly as scholar-practitioners. The teachers, who initially focused on raising the mathematics achievement scores, began to think about what it means to know mathematics and the differences between replication and transformation of knowledge. They began to examine the possibility that they could become practitioner-scholars. (pp. 15-16).

University faculty and administrators engaged over time and committed to work at a PDS site find a "renewed faith in the efficacy of research and its ability to directly affect classroom practice and the preparation of teachers" (Case et al., 1993, p. 50). What facilitates this development is structuring the PDS so university staff, including the dean, can spend a day a week or more at the PDS, engaging in research, teaching, and service.

Summary comments and questions

Most of what is reported in the literature about PDS professional development focuses on K-12 teachers, with less attention paid to the professional development of university faculty and even less to that of administrators at either institution. This imbalance suggests the possibility of differing perceptions of the need for, and importance of, continuing professional development for all participants in the PDS. In fact, some of the few references to principals note the importance of their involvement in the PDS but also suggest that they are often left out and frequently get little support and professional development for the changing roles they face (Neufeld & Haavind, 1988; Cuban, 1987; Trachtman & Levine, 1995; Teitel, 1996).

Research and Inquiry Into Practice

Key characteristics and philosophical underpinnings

Most of the references to research and inquiry in PDSs fall into one of two categories. The first set defines PDS research as different from traditional research paradigms—as a way to move away from "ivory tower" research conducted on schools. Traditional research is usually characterized as work that appears useless and theoretical to K-12 practitioners and that mostly seems to highlight to university researchers that people in schools are doing things all wrong. Murray (1993) provides a definition that seeks to distinguish PDS research from this view:

> PDS inquiry is about understanding the particular case, while traditional university-based inquiry seeks more universal explanations and contributes to general theory. ...PDS research is directed at local action and the particular child. It is about matters that apparently are not penetrated easily by traditional experimental design that employ controls for chance and other seemingly irrelevant factors. (p. 68)

In this sense, PDS research is seen as a way to resolve some of the tension between schools and universities and is modeled on a collaborative action-research

framework. Research problems are to be mutually defined and collaboratively investigated. Findings are to be jointly reported and are used to solve mutually defined problems in ways that allow school faculty to develop research skills and university faculty to "(re)discover" field-based methodologies while both are renewed (Rafferty, 1994).

A second set of references to inquiry in the literature focuses more on inquiry as part of professional development and as part of the definition of teaching. Several authors cite Schaefer's (1967) notion of the school as a center of inquiry and articulate the expectation that teachers should conduct inquiry routinely as a mechanism to understand and assess the teaching-learning process. When this kind of inquiry is jointly done, it can be effective in pushing paradigms and is especially useful because it is developed and owned by teachers. This kind of inquiry can also be a challenge to the status quo (Putnam, 1991).

Specific examples and representative activities

Hunkins, Wiseman, and Williams (1995) report three emerging areas of inquiry in partner schools of the NNER:

Inquiry into the partnership process

These include studies of parity and negotiated commitments in a PDS formation; of the start-up and maturational processes of a collaborative; of the types of research projects completed in a PDS; and of the balance of participation and benefit of school and university personnel. These types of studies are formative in allowing revision and improvement of partnering processes and summative in helping partnerships assess the outcomes of their joint activities.

Inquiry into professional development

These studies focus on how preservice and in-service teachers and university faculty learn best, so PDSs can assess their effectiveness and modify their approaches.

Inquiry into best practice

These include curriculum studies and evaluations of classroom methods. Examples include a discourse analysis comparing two eighth-grade science classes; a study developing and testing an art-home economics interdisciplinary unit; a study of student use of computer networking to study science; and so forth (summarized from Hunkins et al., 1995, pp. 106-114).

Other examples of PDS research (from the University of Connecticut and its PDSs) include

> a large-scale ethnographic and statistical study of school dropouts, the chronicling of a math-science team-teaching and curriculum-planning undertaking, the joint exploration of a global studies program, the examination of the effects of incorporating language arts into the content area of social studies, the tracking of the effectiveness of a computer-assisted writing project for a number of at-risk urban high school and middle school students, and the examination of the success of team teaching in the integration of students with disabilities into mainstream settings. (Case et al.,1993, p. 50)

The literature includes examples of inquiry projects that are primarily done by preservice teachers (Reagan, Norlander, Case, & Brubacher, 1994), as well as those

that are done by classroom teachers using the alternative professional teaching time they have out of the classroom (Boles, 1994). In some studies, collaborative research between teachers and university faculty are reported; in fact, the nature of that collaboration and the obstacles that it had to overcome are also reported in several articles (Roth et al., 1993; Schack & Overturf, 1994). Stoddart (1993) notes that even when research is jointly done, it is usually written up by university personnel.

It appears, however, that overall the research on PDSs is dominated by university faculty. Wiseman (1993) found that there was greater school faculty participation in research after PDS formation than before but that most of the planning, formulation, and analysis was still being done by university partners. One exception was a curriculum study that was seen as valuable by the teachers and the university faculty but was not recognized or rewarded by the university. In some cases, the gains in research in the PDS are primarily increases in university faculty research, as in King and others (1993), where publications by university faculty increased dramatically after the start-up of the PDS.

Summary comments and questions

Despite considerable discussion in the literature about the definition and purposes of inquiry in the PDS, it seems clear that for many PDSs, real collaborative inquiry is not yet taking place. Osguthorpe and his colleagues (1995) summed up their perspective on the NNER: "All partner schools that we have observed could benefit by doing more such research. We have never observed a partner school that is doing too much collaborative inquiry" (p. 267).

Some of the challenges facing PDS inquiry include defining teacher participation in research as something other than scaled-down university faculty research (Kennedy, 1990) and sorting out what appropriate differentiated roles might be, given the differing interests with which school-based and university-based faculty come (Stoddart, 1993). Rafferty (1994) notes that powerful forces make it hard to develop true collaborative research projects. True collaboration is harder because of different perceptions of what is useful as well as different perceptions of status. She suggests the need for skills in group process, the action-research cycle, and adult development.

An additional issue is one of audience and acceptability. Roth and others (1993) note that the collaborative work they have done in their PDS has led to research audiences being unhappy because it is so teacher-centered and teacher audiences being unhappy because it is too theoretical. Their experience raises questions about the need for a paradigm shift in the larger world to reinforce and reward such efforts.

V. Development and Implementation

The first part of this section looks at some of the "enabling characteristics" of PDSs: the changes in structure, governance, financing and so forth that seem to be essential as facilitators of PDS implementation. The second part is shaped by the "core commitments" referred to in the NCATE PDS Standards Project: commitments to shared views of teaching and of student-centered learning, to simultaneous renewal, and to parity and issues of equity. The section concludes with a look at some theories about "stages" in PDS development that may be appropriate in any consideration of developmental standards for PDSs.

Governance

Teitel (1997) describes three basic linking mechanisms in PDS partnership governance structures: liaisons, school or site steering committees, and multisite coordinating councils. These are not mutually exclusive. Some partnerships use all three, depending on the type and scope of their relationships as well as the number of institutions involved. University liaisons are typically faculty members with a quarter- or half-time commitment, who spend a day a week, or two half-days, at a site; school liaisons are often teachers doing this in addition to teaching. Steering committees typically comprise the school and university liaisons (if those positions exist), several school-based faculty members, sometimes one or more other university faculty, and possibly the principal or another building administrator. Committees are usually involved in placing student teachers and planning professional development activities. In more developed PDSs that are embracing a simultaneous renewal agenda, committees have responsibility for the broader school or university improvement agenda. They may focus, for instance, on curriculum and instruction at both institutions or pursue a joint action-research agenda. Larger network coordinating councils are used to make policy decisions in PDSs that are part of multisite collaboratives, frequently centered in a university. They often combine liaisons and local-level steering committees with a broader coordinating council to shape collaborative-wide policy and recommend some parameters for school-site decision making. How these are organized and how much decision-making authority each has vary considerably (Grossman, 1994 Berry & Catoe, 1994; Miller & Silvernail, 1994, Gottesman et al., 1994).

Teitel also notes that these three governance mechanisms—liaisons, steering committees, and network coordinating councils—leave existing school and university structures intact and try to find the best way to link them. Some PDSs use other approaches that more radically alter the existing governance structures at the school and university. On the school side, for instance, schools may move from a hierarchical principal-driven structure to more of a shared decision-making approach. Many PDS networks require evidence of a shared governance system as a prerequisite for the participation of a school (Gottesman et al., 1994; see also Woloszyk & Davis, 1992). Goodlad's (1990) proposal for a "center of pedagogy" represents a radical restructuring at the university level that specifically focuses on the simultaneous renewal agenda. Goodlad sees the lack of "a clearly identifiable group of academic and clinical faculty members for whom education is the top priority" as the "most serious deficiency in all programs" (p. 276). The creation of centers of pedagogy calls for major structural reorganization, with profound implications for governance, personnel, and resource issues. Several of the universities participating in the National Network for Educational Renewal have begun the process of making those structural changes (O'Shea, Taylor, & Foster, 1994; Roper & Davidman, 1994).

Many of the descriptive articles about PDSs identify what their authors see as key approaches to governance that helped get the partnerships going. Mehaffy (1992) argues that four factors led to success: "strong central figures" like the superintendent and the chair of teacher education, good ideas presented well, involvement of key staff (including union leadership) in governance, and adequate resources. Others also note the importance of union involvement and of the opportunity to get people away from their regular workplaces for intensive discussion and planning. King and others (1993) found that in addition to the use of all-day retreats, the inclusion of Hawaii State Department

of Education staff and the education committee of the legislature was crucial to the development and support of the PDS initiative. Several writers note the importance of flexibility in any structure, commenting as Mehaffy does that the structural factors that get the PDS started are not necessarily the best for its continuation. Field (1991) gives as an example the way the Benedum Project added a cross-site steering committee, which was not in the original plan, to meet needs that arose afterward. Teitel (1997) concludes his discussion of governance models for PDSs by stressing that a successful implementation of PDSs goes beyond only looking at structural changes to making changes in organizational culture and building relationships between people.

Financing

Although many PDS articles mention the shortage of time and money and the need for additional resources, very few take a systematic look at funding and funding sources. Goodlad (1995) focuses attention on this lack by commenting that the long-term future of partner school relationships depends on forming partnerships "more tenuous and even more difficult to attain and sustain" than PDSs themselves—with political leaders and funders to provide a stable funding base (p. xiv).

The sources of funding reported in the descriptive studies in the literature include a small number of PDSs with large external grants and many with smaller grants. A few PDSs are funded internally, in some cases by joint contributions of the school districts and of the university and in other cases with funding from just one side of the partnership. Assuming that the primary purpose of many PDS monies is the reallocation of staff time, it makes sense that some institutions have tried to maximize what they can from existing sources or provide compensation for teachers through time, not money. Several authors identify different ways of creating time for teachers. For example, in the Learning and Teaching Collaborative (Brookline/Boston), by having a full-time intern in the classroom, every teacher gets a day a week for alternative professional teaching time, such as research or teacher training or curriculum development (Boles, 1994). On the university side, Paul and others (1993) note how their university has arranged to make faculty members available for PDS work by offering on-site courses to teachers (thereby generating FTEs) and by giving research credit (as much as 25 percent of load) for research in the PDS. In addition, for $2,000, school districts can "buy out" the replacement cost for a course and have another quarter of the faculty member's time.

Harris and Harris (1995) report several creative uses of time and money in NNER partner schools, including using money the university would ordinarily pay to part-time student teacher supervisors to hire preservice teachers to work as half-time interns, thereby freeing good cooperating teachers to supervise other preservice teachers. In another setting, cooperating teachers whose classes are being taught by good preservice teachers replace other teachers for professional development workshops and so on. Harris and Harris note that when dollar values are assigned to these activities, their one PDS network (one university with 23 partner schools) had an operating cost of three quarters of a million dollars that was all exchanged in kind, with no money transferred at all.

Some, like Case and others (1993), make the argument that PDS initiatives should not be funded with grant money—the core of what is done should be based on a reallocation of existing resources and time. They note that at the university and the

school, too many people had seen too many projects disappear once the soft money stopped flowing. By changing job descriptions and curriculum approaches and by seeking economies of scale in student teaching and the alignment of research, service, and teaching, the University of Connecticut has built PDS partnerships from existing resources. They have also been successful in augmenting their activities through a variety of jointly written grants.

One of the few PDSs to make the transition from soft money to firmer funding has been the partnership between the University of Hawaii, several school districts, and the state department of education. A three-year grant in 1985 from the National Educational Association led to funding by the state legislature in 1988. In addition, the PDS has set up a foundation to help support activities and provide a buffer for any future state budget cuts (King et al., 1993).

Despite these and other attempts to use available resources, most PDS advocates, including those cited above for their creative approaches, call for some additional stable sources of funding. In one of the few studies that have looked at the overall funding picture, Theobold (1991) argues that a change like setting up a PDS inevitably will have some winners and some losers and that any reallocation of resources needs to maximize the gains (or minimize the losses) for all parties. He suggests that some PDS costs can be kept low by economies of scale (clustering student teachers, thus saving travel time by university faculty) or the efficient use of personnel (not using skilled, experienced teachers for unskilled nonteaching duties); nonetheless, he estimates that PDSs will need to increase staffing (at the school and the university) by five percent to ten percent. He argues that increases in funding are possible if PDSs demonstrate increases in "productivity," which he defines as "focused publishable research on K-12 education, qualitatively improved educational experiences for preservice and current teachers and administrators (e.g., higher job satisfaction, superior professional skills), as well as a better education delivered to the elementary and secondary students" (p. 90). However, he notes that the present choice of funding PDSs either as extensions of K-12 education or as extensions of teacher education at the university creates barriers that would best be addressed by a PDS governing structure "independent from, but in alignment with" both institutions (p. 97).

A more recent piece by Clark (1995b) underscores the importance of looking at PDS costs more broadly than as just the support of teacher training at the university. According to Clark, shifting to a model that trained all new teachers in a PDS would, depending on which set of plausible assumptions are adopted, lead to a national cost of 1.2 billion dollars or to a national savings of the same amount. Any cost-benefit analysis needs to factor in the gains of the increased services of a PDS as well as the potential long-term financial benefits that might accrue from lower turnover among new teachers who are better prepared. Clark differentiates between start-up costs and ongoing operating costs of a PDS, noting that foundations have been more likely to fund the former but that it has been difficult to provide stable sources for the latter. He also notes that costs will vary from one setting to another on the basis of size, scope, type of institution (e.g., research university or college), and so forth. Clark points out that in some settings, PDS work does not cost more than what colleges pay for preservice education and districts pay for staff development. He recommends that if PDSs run more efficiently and replace older programs (rather than coexist with them), additional costs can be reduced. The report cites examples from other professions for patterns in who pays for internships and other professional training.

Policy

Professional development schools have enormous potential to shape educational policy, not just on the preparation and licensure of new teachers, but on the whole interwoven agenda of learner-centered schools, collaborative decision making, school reform, professional development of experienced educators, inquiry, and so forth. Darling-Hammond (1994) notes that PDSs offer ways to rethink teacher learning and thus influence how an estimated four million teachers will enter the profession over the next two decades. Moreover, as PDSs work to redefine ways of knowing and ways of building knowledge, in contexts that call for mutual restructuring, they have tremendous potential to influence policy at the state, district, and university levels. This potential, however, is still largely untapped. Maryland has recently adopted a proposal (Fessler, 1994) for teacher certification that has a substantial role for PDSs. Other states, including Minnesota and Michigan, have considered similar approaches (Darling-Hammond, 1994b). Massachusetts briefly supported an innovative program for fostering PDSs (Neufeld, 1992); although it continues to support scattered PDS-like initiatives amid a climate of renewed interest in the professional development of experienced teachers, it has not made PDSs a central part of its educational reform strategy.

The connection between PDSs and policy contexts cuts both ways: even if the potential for PDSs to shape policy is not yet realized, the policy contexts created by states, districts, and universities definitely do influence and constrain PDS formation and development. Neufeld (1992) suggests that PDSs that ignore the policy context in which they operate do so at their own peril. In addition to noting the ways in which PDSs may bump up against school district and university policies, she takes a comprehensive look at state policies that help or hinder the establishment of PDSs. She suggests that statewide policies most conducive to PDSs will do the following:

1. enable schools to develop locally conceived school/college collaborations;
2. support, or at least remain neutral with respect to new roles for teachers in teacher preparation;
3. sustain or create local authority to develop preparation programs and assessment strategies for those who will work with preservice and novice teachers;
4. support an inquiry approach to teaching as work;
5. view teachers as producers as well as consumers of research knowledge; and
6. consider the school as a unit of reform. (p. 151)

Berry and Catoe (1994) write of the difficulties that an adverse policy context has on the formation of the PDSs in South Carolina. State-mandated teacher evaluation instruments (requiring a demonstration of 51 discrete teaching behaviors in a 50-minute observation period) undermine the efforts and direction of teacher learning in the PDS. Other difficulties come from funding agencies with a "project mentality" and from the sheer proliferation of reforms, which makes focusing on anything in the PDS very difficult. Darling-Hammond (1994) calls for ending the disconnect between PDSs and policy:

> Unless policy and practice are jointly reconstructed across institutional and state bureaucracy boundaries, the possibilities for creating a foundation for

learner-centered teaching and teacher education will, once again, go unrealized. On the other hand, if policy makers and practitioners together seek to create PDSs that push the edges of teaching knowledge forward while restructuring teacher education and schooling, they will have made a profound contribution to real and lasting education reform. (p. 26)

Institutionalization

Perhaps because PDSs are such a relatively new entity, not much has been written about the institutionalization of a given PDS. Although some of the literature addresses the need to "develop long range plans and management strategies which will facilitate the successful implementing of all project goals and objectives" (King et al., 1993, p. 19), this has not always been a priority for educators struggling to get a PDS up and running. Institutionalization issues often show up in the literature tied to the governance and financing issues discussed above. Another related topic concerns changes in reward structures to recognize and appreciate work done in PDSs. Creek (1995) reports no change in university faculty rewards; others raise similar questions about rewards for K-12 teachers (Book, 1996, Snyder, 1994). Some anecdotal evidence suggests that junior faculty members may reduce their chances of receiving promotion and tenure by engaging in the time-consuming work of a PDS because they are not producing the empirical research usually valued at the university. A few more positive reports can be found. Case and others (1993) report that although faculty members are still expected to publish in refereed journals, equal weight at their research university is now given to the kind of field-based research that might come out of a PDS. Furthermore, they describe (as does Teitel, 1992) changes in faculty hiring at the university to include criteria about experience in, and commitment to, field-based education.

Aside from changes in governance, financing, reward structures, hiring, and promotion and tenure processes, other mentions of institutionalization describe the need to deepen partnerships through building relationships (Miller & O'Shea, 1994) and increasing the people-to-people involvement of more participants from each institution (Teitel, 1993, 1997). Others express the concern that by institutionalizing the PDS, they will lose the very spontaneity and "bottom up" collaborative approach that is so special. Darling-Hammond (1994) describes the difficulty of getting PDSs, which tended to start on the margins of both organizations, woven into the institutional fabric. Teitel (1994) notes the tension between needing to be rooted in one organization to bring about systemic change and needing to build bridges to another organization to create and sustain an effective partnership.

Role of Networks

Many, although not all, PDSs are part of networks. Network membership helps avoid the "funny farm syndrome" by helping normalize what may be seen as aberrant behavior in a particular district. Participating in networks helps break down the isolation that schools can experience by creating opportunities to share information and psychological support beyond the walls of the schoolhouse (Lieberman & Miller, 1992). For Kennedy (1990), networking adds "intellectual respectability" to PDS efforts. Specific and concrete help can come from networks: Icabone (1992), in a

planning document for establishing a PDS at Western Michigan University, points to a number of practical ideas that came from the Michigan Partnership for New Education and from one of its participants, Michigan State University. Western Michigan then used what it learned from its network to establish criteria for selecting partners, develop models for collaborative agreements, and, overall, understand the stages it would have to go through (Wolosyzk & Davis, 1992). Networks can also help their members with particular aspects of developing PDS partnerships. The Massachusetts Field Center for Teaching and Learning has run communications workshops at which PDS partners could use case studies to promote discussions on difficult issues. The National Network for Educational Renewal has developed a "Compact" that outlines common commitments made by the participants as well as a set of expectations that establish criteria for self-assessment (Clark, 1995a).

Core Commitments

Most of the foregoing categories deal with structural enablers. Another way to view the circumstances that promote the establishment and nurturing of PDSs is to look more at beliefs and culture. The literature has numerous references to the importance of shared beliefs and commitments. As a participant quoted by Richardson Foundation (1993) put it, "PDS is more than a building, it is an attitude." Osguthorpe and others (1995) elaborate the importance of shared expectations and goals among partners, noting the need for "collaboration, community, and connectedness" in the NNER partners schools. Harris and Harris (1995) point to prerequisites for partnership formation: enough (shared) discontent with the status quo in teacher preparation and public school functioning to motivate all parties to work on renewal, and leadership able to label the discontent and move forward to accept a "new paradigm concerning knowledge, teaching, learning, and leadership" (p. 131). Stallings, Wiseman, and Knight (1995) echo this and note that "shared vision requires both parties to consider two essential questions. First, as educators, what are our goals for our students and ourselves? Second, how does a partnership move us both closer to meeting our goals?" (p. 137).

The PDS Standards Project has identified three core commitments: shared views of student-centered learning, simultaneous renewal, and commitments to parity and equity. Each is briefly explored below.

A number of the handbooks available on PDSs or the articles describing their start-up highlights the importance of shared views of student-centered learning. For instance, Wolosyzk and Davis (1992), in their criteria for partners school selection, list the importance of a partner being "congenial" with the "mission, philosophy, goals, and resources" of the university. Del Prete (1990) echoes this sentiment and writes about the importance of shared views about teaching, learning, and reflective practice. The CORE developed at the University of Connecticut underscores the common elements of teaching and learning to be experienced by prospective teachers, counselors, and administrators (Case et al., 1993).

The commitment to simultaneous renewal, which is often closely linked with the equity and parity concerns described below, calls for a mutuality that stands in contrast to the historical role of universities in trying to "fix" schools. Goodlad (1988) eloquently makes the case for simultaneous renewal by noting the failure of previous uncoordinated efforts at reforming schools and teacher education. Snyder (1994) captures the historical tensions in school-university relationships by referring to three

models of educational change: the traditional "SIP," School Improvement Program, where universities fix schools; the "Flip-SIP," where the assumption is that schools will fix the university; and the "PDS," which provides collaborative and mutual renewal. Getting to that mutuality is challenging: "Building a community of trust in which each [school-based and university-based educators] could admit publicly our fears and insecurities, breaking down barriers of defensiveness, and creating respect for each other did not happen overnight" (p. 53).

For simultaneous renewal to be given more than lip service, parity and equality are essential. However, because of conflicts over whose type of knowledge is worth more, and the tradition that puts university knowledge on top, and because of other differences in status and relative power, much of the literature describes the difficulties of attaining parity and real shared leadership (Collinson, 1994; Waters, 1993; Rushcamp & Rohmer, 1992). The lack of parity can cause a breakdown in communication as Collins (1995) points out in an aptly named chapter, "Listening but not hearing: Patterns in communication in an urban school-university partnership." The lack of parity can show up even before a PDS partnership is formed, in the way so many partnerships are formed by universities—selecting schools to participate, establishing criteria that apply to the school, but always implicitly assuming the participation of the university. In some cases, parity in numbers and structure is built in, such as when the state agency encouraging partnerships in Texas required each planning committee to have one more teacher than members of any other role group (Stallings & Wiseman, 1994). But traditional hierarchical attitudes persist even with structural equality established: "Changing these traditions and creating a sense of parity among roles and within relationships is not as simple as making statements about 'shared ownership' and soliciting input. Individuals must consider how issues of power and authority might be, if not resolved, at least brought into arena for more open and constructive consideration" (Ellsworth & Albers, 1995, p. 172). Stallings and others (1995) recommend a close look at parity in all the shared processes and products of the PDS and suggest that part of the joint research agenda of the PDS should be to look at the relationship itself by using the inquiry as a way of weeding out superficial relationships.

Others suggest that having people take on unfamiliar roles will encourage parity. A PDS advocate at a university notes that university faculty get past the "ivory tower" quickly when they teach in K-12 settings. He suggests that parity can be achieved if "we open ourselves up to influence in [the way the university organizes and delivers teacher education] as much as teachers are willing to open themselves to influence in teaching and learning for K-12 students" (Kennedy, 1990, p. 9). Another way to encourage the role exchanges and mutual risk-taking and shared exposure is through outward bound type shared experiences (Gottesman and others, 1994).

Issues of **equity** show up in the literature with several different meanings. One has to do with whether PDSs are committed to working with urban schools and with groups of students of color who may be from poorer socioeconomic classes. In a critique of PDSs, Wilder (1995) assumes that most of the established professional development schools are white and middle class and wonders whether the PDSs that are urban really recognize the need to prepare preservice teachers to better serve students of color. In contrast, Zeichner and Miller (1997) conclude that "there has

been a significant amount of PDS activity in rural and urban schools serving children of the poor…schools where graduates of teacher education programs have generally been reluctant to teach"; but they echo Wilder's concerns about how well PDSs include work with parents and communities to enable the predominantly white teaching force to work well with students from diverse backgrounds. Many teacher education programs are working on these issues by deliberately seeking partnerships with inner-city schools where the possibilities are broader for this exposure (Sewell et al., 1995; Pugash & Pasch, 1992). Others have taken thoughtful looks at curriculum "revisioning" and are moving to provide interprofessional approaches to working effectively with urban communities (Swap, 1994). Some programs rotate their placements to give preservice teachers experiences in urban settings (Reagan et al., 1994).

Other questions about equity include concerns about the equitable sharing of resources within a district. Creek (1995) points out that stable funding for PDSs will be hard to come by because the perception (and reality) of differential spending for schools within a district will be unpopular with district administrators. Beglau and Granger (1995) acknowledge the concerns about equity that have arisen with partner schools in the NNER. In non-PDS schools, teachers and parents have raised questions about access to the special services and experiences of PDSs. Beglau and Granger describe several approaches used to mitigate the inevitable inequities: making sure that accurate information about the PDS is available in the community, inviting non-PDS teachers and administrators to visit and participate in the professional development activities, and rotating partner school status over three- or five-year cycles.

PDS Developmental Stage Theories

Several of the works about PDSs describe their growth on a developmental continuum. Although only a few specifically mention a stage theory, it is implicit in several others. Dixon and Ishler (1992b) describe six stages of evolution for PDSs: formation, conceptualization, development, implementation, evaluation, and termination/reformation. In their PDS handbook, Wolosyzk and Davis (1992) take a practical approach to developmental theory. As they describe each of four developmental "phases"— exploration, orientation, implementation, operation—they provide recommendations for each: how to make good school-university matches in the exploration stage; how to close the orientation phase with a formal agreement; and what types of management structures, activities, and roles work best for the implementation phase. It is in the operations stage that they focus on, moving from potential benefits to the elements of reform and restructuring in the school and the teacher preparation program. The Michigan Partnership, with its substantial experience in fostering the start-up of PDSs, describes four stages:

- Initiation/exploration: the phase in which PDS participants get to know each other, establish working relationships, educate each other, and agree on how to define the problems they are up against;
- Design: the phase in which PDS participants develop initial approaches and theories about problems they have defined;
- Pilot: the phase in which PDS participants try out the approaches they have designed and assess and revise the approaches (as well as the theories on which they are based; and

- Stabilization/refinement: the phase in which PDS participants use the capacity they have built and engage in continuous refinement over long periods of time (quoted in Torres, 1992, pp. 2-3).

Stage theories that identify predictable steps through which PDSs are likely to go in their formation may be useful in informing the preparation of standards that take into account the developmental nature of PDSs. Probably because PDSs are relatively new, less has been written about the stages or substages that partnerships go through after the start-up years. A separate set of challenges face PDSs as they move into adolescence and maturity: issues of maintenance and growth, choices about trying to go deeper (within a school, for instance) or go wider (to involve more schools in a district); challenges of bringing in new people who were not there at the beginning and of maintaining the interest of the veterans. When more is written about mature PDS partnerships, more comprehensive stage theories may be developed.

Standards for PDSs

The stage theories, and the developmental notions that undergird them, are useful jumping-off points for any discussion of standards development for PDSs. Houston (1992), in an early concept piece on standards, suggests an "intellectual building code" that outlines the core beliefs of what constitutes a PDS, without attempting to develop standards or specify paths to attain them. The more recent work on standards of Sykes (1997) suggests that any standards-setting process should accommodate the developmental nature of the PDS and should itself be developmental in four ways: by engaging a range of participants in the formulation of the standards; by reviewing and revising the standards themselves over time; by applying standards in a way that encourages organizational learning, not just compliance; and by accounting for the developmental stage of the PDS at the time of application. To avoid the danger of premature evaluation, Sykes proposes that certain "threshold conditions" be met before a PDS seeks to undergo any kind of standards review. These conditions include a shared commitment to basic principles; adequate resource exchange agreements be in place; meaningful involvement of key participants; and governance arrangements that outline rights, responsibilities, and roles in a way that is sufficient to get started. Furthermore, to respect the developmental, "bottom up" quality of the PDS movement, he suggests a voluntary review process that offers incentives for earning certification as a PDS that has passed the standards rather than imposes sanctions for not doing so.

The nascent development of standards for PDSs is not rooted in just the stage theory of PDS development outlined above; it is interconnected to virtually all the other subheadings in this section as well. Methods of governance and financing and evidence of core commitments to equity, parity, and so forth are likely to be among the criteria for any standards assessment; conversely, the existence of agreed-on standards for PDSs will undoubtedly affect how those issues are pursued. Networks may very likely play an important part in the development and dissemination of standards and may themselves be affected by the process of their development. Similarly, the existence of standards will have an impact on any discussions of institutionalization or policy, just as policy contexts will affect the development of the standards.

VI. PDS Effectiveness

Very few real evaluations of PDSs can be found in the literature. There are some guidelines and suggestions for how to conduct a PDS evaluation; there are several studies of attitudes of students and teachers in PDSs; and there are a few studies of PDS processes. Each is briefly described below.

Clark (1995a) and Sirotnik (1988) explain why a traditional experimental design is not suitable for the complex interorganizational partnership that is a PDS. In lieu of the traditional design, Clark suggests key steps in the process of "collaborative critical inquiry"— to define the stakeholders, identify common values, and then identify satisfactory summative and formative processes. He uses the values statement of the NNER and the expectations to which partner schools have agreed as a springboard for developing indicators that could be used in an evaluation. He also identifies potential data sources for such an evaluation and urges educators to use the process to examine themselves, to satisfy external audiences, but also to improve their own efforts. Osguthorpe and others (1995) acknowledge that no partner school has yet to implement an evaluation along the lines of Clark's recommendations.

In her review of the literature for the *Handbook for Research on Teacher Education*, Book (1996) describes the paucity of real evaluation, explaining that many of the studies are limited by unclear descriptions of the methodologies and are sometimes confounded by difficulties over publishing what may be seen as judgmental works about ongoing processes and relationships. Since most of the published studies of PDSs focus on start-up stories, roles and relationship changes, and teacher attitudes, Book notes a need for research on the impact of PDS restructuring on student learning. Zeichner and Miller (1997) share a similar attitude about the overall state of research on PDSs, concluding their review of changes in teacher education resulting from PDSs by noting that "convincing evidence has not been presented to date that this reflection and collaboration have resulted in the more learner-centered and learning-centered teaching that is claimed to be an essential part of PDSs" (p. 41, draft).

Most of the literature listed in ERIC as PDS evaluations comprises attitude surveys about expectations or satisfaction with the PDS that are usually targeted at student teachers or cooperating teachers. Researchers have struggled with how to establish control or comparison groups, in some cases comparing subjects with non-PDS equivalents; in other cases, doing longitudinal comparisons with the same group; and occasionally reporting data without a comparison group. Woloszyk and Hill (1994) surveyed student teachers on their level of agreement with various Holmes Group statements. They compared eight student teachers assigned to a PDS with thirteen in traditional student teacher placements and found some minor differences; overall, most student teachers supported the Holmes Group principles. Student teacher attitudes toward teaching are compared by Benton and Richardson (1993) in a longitudinal comparison study; that is, they compared student responses on a set of questions before and after their experiences in the PDS (with no external comparison group). Morris and Nunnery (1993) used a survey of questions relating to teacher empowerment with 140 teachers in six PDSs. Responses confirmed the increase in the teachers' perceptions of their efficacy as mentors and as teachers as well as of their professional knowledge and collegiality. Ironically, despite the increases on these items, teachers also reported lower roles in actual decision making in their schools.

Moore and Hopkins (1993) abstracted from the PDS literature twelve aspects of professional development schools and nine potential areas for additional training of teachers to work effectively in PDSs. They surveyed teacher educators (response of 128), principals (198), and teachers (84) not necessarily active in PDSs, asking them the relative importance of each aspect of the PDS design and each suggestion for teacher training. They found significant divergences among the three groups over the importance of changing the reward structures of teachers and teacher educators, of providing release time for teachers for PDS activities, and of having professors conduct research in the PDS. In all cases, teacher educators rated the item as more important than did either the principals or the teachers. Similarly, in the section on perceived training needs of public school teachers, the teacher educators rated several areas of need as significantly more important than the teachers and the principals did.

Whereas Moore and Hopkins drew a sample without apparent regard for previous involvement or experience with PDSs, Shen (1994) focuses a similar set of questions on cooperating teachers currently working in a PDS. Shen uses in-depth interviews to get their perceptions of what they see as important in a PDS, which Shen then compares with the more theoretical definitions of PDSs in the literature. Shen's key findings show cooperating teachers focusing on preservice and in-service professional development to the exclusion of developing exemplary programs for students or conducting research on best practice, which leads Shen to wonder how the PDS, so conceived, is different from a more traditional apprenticeship model.

Other studies of attitude changes include changes in mathematics teachers' attitudes (Gross 1993) after involvement in the PDS, as well as the more general Woloszyk (1992) comparison of teacher attitudes on a school climate survey taken in 1986 and again in 1991 (the school had become a PDS in 1989). By analyzing changes on the items that particularly match the Holmes Group definition of a PDS, Woloszyk concludes that becoming a PDS had a significant impact on teachers' views in several areas: organizing the school as a community of learners, seeing the school as a place where adults as well as children are taught, and making reflection and inquiry a central part of the school. However, he notes that some of the significantly different responses went the other way, for example, more negative views of the school as a place where problems are dealt with openly and more negative views about the expectations that teachers hold for students. Through follow-up interviews with faculty members, Woloszyk provides explanations for why responses did not show a consistent gain from PDS involvement.

Relatively few studies have set up meaningful comparison groups for assessing PDS impacts or have tried to measure quantifiable outcomes or impacts of PDSs by using something other than Likert scale-like attitude surveys. King and others (1993) look at the effectiveness of their own PDS in Hawaii, by primarily using quantitative process measures. They examine overall numbers of cooperating teachers recruited and trained, percentages of cooperating teachers voluntarily attending professional development workshops, and the numerical values of the evaluations done by participants on each one. For each of these and other process indicators, they set an arbitrary cutoff (i.e. 50 percent voluntary attendance of teachers at workshops) and then reassess if percentages fall below the cutoff. Waters (1993) uses attendance and suspension data as a way to draw on other data that are typically available within a system for the evaluation of PDSs. To compare the impact of being a more fully

developed partnership, Kyle (1993) uses some indicators of continuous process improvement and three other measures to pick and compare schools on the continuum of restructuring.

Yerian and Grossman (1993) compare student teachers in the professional development centers with those in the traditional education program on a variety of issues relating to their perception of the student-teaching process. The student teachers were significantly more positive about access to on-site support and, in general, about the supervision they received in the PDSs.

Derrington (1995) tried to draw on multiple sources of information as part of a legislatively mandated evaluation of the Southwest Washington Regional Collaborative PDS Project. Although the research plan called for an evaluation of the action-research projects conducted at each site, a longitudinal study of student performance, and the development of a replicable model of PDSs, Derrington found that a lack of baseline data in most of the schools made a quantitative analysis of student gains over time impossible except in one of the schools. Even there it was difficult to sort out the gains that might be attributed to PDSs from student gains that might have taken place anyway. Most of the evaluation report draws on Likert scale statements about the process of the collaborative, collected from the teachers involved and combined with interview data of key stakeholders and summaries of the action-research reports.

Others have used qualitative and other ethnographic approaches to focus on specific aspects of PDS partnership formation. Fear and others (1991) draw on narrative data from steering committee meetings and from field notes as participant observers in curriculum planning to focus on how status and hierarchical organizations affect equal collaboration between school and university faculty. McGowan and Powell (1993) used interviews and classroom observation to determine what attracted classroom teachers to participate in PDSs and what hopes they had for outcomes. Ruscoe and others (1989) call for the use of ethnographic research as the appropriate tool to look at PDSs, in part as a way to shift the locus of expertise from the university and have it shared more with the school.

Stallings (1991) is one of the only researchers to use multiple measures to assess the effectiveness of a PDS. The study of the "Learning to Teach Diverse Populations" PDS project in Houston, Texas, focused primarily on the changes in classroom behaviors of student teachers and cooperating teachers, as measured by trained raters on a previously validated classroom-observation instrument. For comparison purposes, Stallings used a control group made up of comparable student teachers in traditional practicum placements; both groups had observations made at the beginning and end of the semester. In addition, follow-up interviews were done with student teachers; data were compared for student achievement; and job placement data were augmented with rankings by principals of how graduates were doing as first-year teachers. The data not only confirmed significant improvements in actual classroom teaching (by student teachers and by their cooperating teachers), they highlighted increased interest in (and follow-up placement in) urban school settings, which was one of the goals of the program. The study reported high rankings by principals, strong professional growth by the cooperating teachers, and gains in student achievement on standardized test scores. Stallings's study stands out as one of the few that have used multiple qualitative and quantitative measures in a carefully designed study that presents data on the impacts of PDSs in a convincing way.

Conclusion

I hope that this review of the literature on professional development schools is intended to inform the NCATE PDS Standards Project in several important ways. It highlights what is known and reported about PDSs and identifies some of the characteristics of PDSs that may help shape any standards-setting process. Two caveats are in order. The review is based on published reports that are often written by the participants themselves, not on empirical research or direct observation; it is possible that the reports may overstate the progress a PDS has made. Nomenclature is still inconsistent, and words like *intern, student teacher, clinical professor,* and *supervisor* have different meanings in different reports. One author uses "professional development team" to indicate a cluster of teachers within a school working with a college (Schack & Overturf, 1994), whereas another refers to that arrangement as a "professional development center" (Reed 1996). Case and others (1993) use the term "professional development center" to indicate full-fledged partnership schools that support clinical experiences of teachers as well as of guidance counselors, school psychologists, and principals.

The review points out that based on what is reported in the literature, the four goals of professional development schools are not being pursued with equal vigor; there appears to be more emphasis on preservice and in-service teacher education than on supporting student learning and on inquiry. The review also illuminates what is not known—and underscores the need for more research on the impacts of PDSs on student learning, on changing the culture of the schools and the university, and on developmental issues of more mature PDSs. Finally, the review highlights the need for some sort of flexible and developmental standards to help settle the question asked by Book (1996) of when it is appropriate even to call a partnership a professional development school.

Addendum and Update – 1998

It has been two years since the preparation of this literature review for the PDS Standards Project-two years in a field that is rapidly growing. The volume of publications about professional development schools is proliferating as are the partnerships themselves. The ERIC search used for the original literature review in mid-1995 listed almost 200 entries; a recent search shows that more than 125 additions have been placed into ERIC in the years since. In addition, several books on professional development schools have been published (Levine & Trachtman, 1997; Hoffman, Reed, & Rosenbluth, 1997; Abdal-Haqq, 1997a).

This addendum and update is offered to provide an overview of the literature published in the last two years — a sense of what themes emerge and an update on what important areas are still missing. This addendum draws on (with my grateful acknowledgment) the work of Ismat Abdal-Haqq, coordinator of the Clinical Schools Clearinghouse at AACTE and author of Resources on Professional Development Schools, an annotated bibliography (1997b).

Six themes emerge in a sharper, and more crystalized way in the last two years of PDS publications, especially in comparison with the prior literature:

- There is a growing clarity and consensus on the definition of a PDS.

- Increasingly complex PDS collaborations are reported in increasingly complex ways.
- There is a growing interest and application of technology to PDSs.
- PDS concepts are expanding into other areas, creating broader, more interdisciplinary approaches.
- With the growth of PDSs come increased concerns about equity.
- There is a continued need for good assessments of PDS impacts.

Each of these is described below, with particular attention to the last one—the need for good assessments of PDS impacts.

There is a growing clarity and consensus on the definition of a PDS

In the early days of professional development schools, many of the publications focused on defining what PDSs are, and telling the stories of how they have been established. Less time in the last two years has been spent defining the PDS. A consensus has clearly emerged on what it means to be a PDS, although there is less clarity on how to assess whether a partnership is one. Articles like Cook (1996) "Is your school PDS material?" and Dodd (1996) "A very different kind of teacher education program: Professional development schools" which provide basic descriptions of just what a PDS is, with examples, still appear; however, they are not as nearly a dominant presence in the literature anymore. Articles about PDSs routinely refer to others for the definitions, either to the Holmes Group, the National Network for Educational Renewal, or the NCATE PDS Standards Project.

Increasingly complex PDS collaborations are reported in increasingly complex ways

Although the recent literature is still replete with start-up stories of PDSs (Moore & Looper, 1997; Brown & others, 1996; Kroll & others, 1997) one noticeable difference is how many more of the start-ups are involved in multiple PDS sites, networks, or in more complex relationships (Higgins & Merickel, 1997; Baker, 1996). Much of the earlier literature described PDS start-ups that were frequently informal relationships between one college professor and a handful of teachers. With the passage of time, these relationships have become more formalized and it is now not uncommon, for instance, for an article on a one-year old PDS to include a copy of its partnership contract, complete with sign-offs from high ranking administrators from both institutions (Gettys & Ray, 1996). As PDSs move in from their "pilot" status on the fringes of the university and district, the literature provides more examples of multi-party arrangements (Burke & Galassi, 1997), including statewide commitments to the growth of PDSs as vehicles, for instance, for the initial preparation of all new teachers (Clemson-Ingram & Fessler, 1997).

Furthermore, with longer histories and more complicated partnerships taking place, PDS collaborations are being reported in increasingly complex and sophisticated ways. In *Contradictions in Collaboration: New Thinking on School/University Partnerships*, Marilyn Johnston (1997) and the participants of eight PDSs in Columbus and Worthington, associated with the Ohio State University, have written a book that reads almost like a play, with participants entering and exiting to add their piece on the challenges of collaboration. The sixteen authors reflect on the seven years of

PDS development, describing how the differences between school and university cultures led to tensions which they have tried to keep productive and positive through on-going dialog. Another example in which the presence of multiple voices provides a more nuanced quality to the literature is in an edited book by Hoffman, Reed, and Rosenbluth (1997), where 23 author/participants tell different portions of the story of the eight-year old Benedum Collaborative, involving West Virginia University and four county school systems.

In addition to these more sophisticated examples of collaborative voice, there are now more examples in the literature that compare and analyze PDS start-ups and implementations, e.g. how well a PDS takes hold in one school versus another (Rakow & Robinson, 1997; Campbell, Strawderman, & Reavis, 1996). These analyses provide opportunities for authors to report what works in one setting and how well it translates to another (Cambone, Zambone, & Suarez, 1996). And while much of the early PDS literature was filled with success stories (while, presumably, failed or aborted PDSs were not reported), these comparative analyses acknowledge the tough tasks in starting and sustaining a PDS. Along with articles like Teitel's (1998) account of "Divorces, Separation and Open Marriages" in a PDS network, they represent a maturation of the literature allowing for a deeper discussion of what works and what does not in these partnerships.

In the same vein, the longer time period since PDSs began allows for longitudinal studies like the account by Bullough and others (1997) of the PDSs affiliated with the University of Utah. Since at the inception of the program in the mid-1980's, the University asked each school to make a five year commitment to being a PDS, the authors are able to report data on the choices schools have made to renew or not, what variables contributed, how administrator turnover affected long term commitment to being a PDS, and so forth. Bullough and his colleagues note with some concern the difficulty of making deep-seated change in going beyond the perception held by many cooperating teachers that the PDS is a better way to do student teaching, but not much more. Teitel (forthcoming) also notes, in a five-year return visit to PDSs that are now eight to ten years old, his concern that these partnerships may have "plateaued" and, having made a great deal of progress on improving the student teaching experience, they have retreated from the deeper changes involved in simultaneous renewal.

There is a growing interest and application of technology to PDSs

The parallel growth of interest in technology has intersected with the expansion of PDSs to create new approaches to using technology training as part of school improvement. DeWert and Cory (1996) focus on how technology can improve the environmental education program at the school, while Grau (1996) compares traditional preservice teachers and those prepared in a PDS on how well each group was able to transfer their learning about technology into their own first-year teaching practice (noting the comparative gains for those prepared in the PDS). Others describe the opportunities to enhance the PDS model itself through technology, as in the use of two-way television for classroom observation at a distance (McDevitt, 1996). This intervention allows more opportunities for pre-service teachers to observe exemplary teachers and discuss practice; it boosted enthusiasm for the use of technology for both pre- and in-service teachers. Some see changes dramatic enough in their use of technology to advance the notion of a "virtual PDS" (Peterson & Facemyer, 1996).

PDS concepts are expanding into other areas, creating broader, more inter-disciplinary approaches

At the same time that some PDSs are embracing more technology, others are expanding beyond regular teacher education to include other fields like psychology, special education (professional development, n.d.) and social studies (Chase, Merryfield, & Chism, 1996). There is a clearer overall movement to expand and to break down traditional disciplinary barriers as illustrated in an article "Involving the School Psychologist: How to break the barriers to collaboration on professional development school leadership teams" (Robinson, 1996). Paralleling these are efforts to engage discipline based, and liberal arts faculties in active involvement with PDSs (Richmond, 1996). Many PDSs are thinking of themselves more broadly as full service schools or inter-professional schools (Lawson, 1996), or integrated service programs (Abdal-Haqq, 1997a). In these models, schools, because of their ready access to children and youth, can serve as "hubs" of services and supports provided by mental health professionals, social workers, juvenile justice personnel, and health care providers. Three of the National Network for Educational Renewal sites reported in Osguthorpe and others (1995) provide such "inter-professional collaboration" opportunities, as does the Wellness Project at the University of Louisville (Abdal-Haqq, 1997a).

With the growth of PDS come increased concerns about equity

As PDSs are increasingly seen as key pathways to the teaching profession in states (Maryland Higher Education Commission, 1995; Minnesota State Board of Teaching, 1994; Kleinhammer-Tramill & others, 1996) and as significant vehicles for school reform, concerns about equity have grown considerably (Murrell & Borunda, 1997). Valli and others (1997) completed a literature review focusing on PDSs and equity, examining through the literature the extent to which PDSs have been living up to their promise of increasing equity for all students. The authors identify several commonly accepted goals of professional development schools: teaching and learning, professional development, inquiry and so forth. For each goal, they frame their discussion with a quote from the Holmes Group (1990), summarize their findings from the literature, and end with a section on "equity implications." They conclude their assessment by commending the Holmes Group and other PDS advocates for seeing the need to connect school reform movements like PDS with equity and social justice; nonetheless they conclude by noting that their research shows that "most PDS partners have either not attempted or are floundering in this undertaking (p. 299)."

Murrell (1998) takes this critical look at PDSs and equity even further, arguing that not only have PDSs failed to live up to their rhetoric about equity, they actually can, as currently constructed, stand in the way of successful urban school reform. For example, he describes the bilateral nature of most PDSs (as partnerships between schools and colleges or universities) as blocking and excluding other parties that must be involved for equity concerns to be properly addressed: parents, community members, youth and community-based organizations. He notes that the focus in PDSs on the professional development of teachers detracts from the needs for development of parents, schools, neighborhood, and children. Murrell worries that as PDSs become more established and better defined, clearer models and approaches will be available

to draw upon, and adherence to those models will take precedence over the equity challenges and the needs for improvement of urban schools.

There is a continued need for good assessments of PDS impacts

One of the most important topics that continues to be a concern about PDSs is the assessment of impacts. The 1996 literature review reported (along with Book, 1996) the paucity of quality studies of PDS impacts. This shortage continues (Abdal-Haqq, 1997a). Several efforts in the last few years have been trying to remedy that. The Colorado Partnership for Educational Renewal is engaged in a complex assessment project, involving six universities and twelve school districts. The "empowerment evaluation" approach they are using is consciously designed to assess what impacts are taking place at the local partnership level, as well as at the statewide Colorado Partnership level (Kozleski and others, 1997a 1997b). Another current effort at multi-site documentation of PDS impacts is the National Education Association's Teacher Education Initiative. With significant financial support from the NEA, the TEI has developed a common questionnaire applied across seventeen sites. It focuses on how well participants think the nine TEI "Principles" are being implemented; on perspectives from preservice teachers, university supervisors, mentor teachers, and administrators on how well the partnership is going; and on what changes the partnership has brought about in the preparation of future teachers. It uses a combination of narrative responses from the participating sites, interview and survey data (Loving, Wiseman, Cooner, Sterbin & Seidel, 1997).

As noted in the 1996 literature review, most studies still focus primarily on impacts on pre-service teachers, and still struggle to get meaningful comparisons or to go beyond using self-report data, usually from a survey instrument, as the sole or primary source of data. Kroll (1997) uses survey responses from student teachers and experienced teachers to document the changes in the student teaching experience. Telese (1996) tracks changes in student teachers' philosophical attitudes toward teaching by comparing their responses on survey questions before and after their field experience. Cifuentes (1996) uses a similar methodology to compare preservice teacher views on how much to use lecture as part of teaching, before and after a course designed to have them reconsider other approaches.

Several studies establish comparison groups, again, largely for analysis of self-report survey data. Teach for Tomorrow (Growing Young Minds, 1996) uses as a comparison group other (non TFT) beginning teachers by having them complete the same new teacher questionnaire assessing their preparedness. To establish comparison groups, Long (1995) uses regular students (non PDS), as do Hecht and others (1996), who use a 150 item survey as their key source of data.

Cambone and others (1996) present one of the more carefully documented evaluation studies, using multiple measures, many of them integrated into the program. Different perspectives are utilized, including those of employers, or those that are gained by examination of portfolios and through focus groups to help document student growth and changes in perspectives.

Others write of other kinds of impacts relating to the preservice teaching experience: changes in processes in a teacher education program, for instance (van Zandt, 1996). Russell and Harris (1996) describe the "complete transformation" of a teacher education program—its curriculum and instruction, policies, partnerships, professional development of its faculty and so forth. As Abdal-Haqq (1997a) notes, the need

persists for follow-up studies of teacher education candidates that track them into the profession, particularly studies that look for evidence that their preparation in a PDS helps them look inward and develop reflective practice, and look outward to work more effectively in the larger community and school community.

Although most of the documentation focuses on preservice teachers, there are some reports of impacts on experienced teachers (more often at the school than the college). Bullough and others (1997) interviewed 49 teachers and principals (seven from each PDS affiliated with the University of Utah) to look at the changes in their views of their teaching practice and self-reflection. Moderate changes on those measures are noted, but (to the authors' evident concern) few changes are seen in the teachers' views of how a novice teacher learns to teach—the importance of theory versus practice, the respective role of the school and university, etc. Christensen and others (1996), using a much smaller sample, provide a more finely textured look at impacts of involvement with PDS on classroom teachers—in part because the article is written primarily by classroom teachers, which is still unusual in a literature mostly authored by university faculty.

Campbell, Strawderman, and Reavis (1996) combine a Likert survey methodology with follow-up interviews by outside evaluators to look at impacts on experienced teachers' views of self-efficacy, empowerment, and their perceptions of the PDS impacts on their school and students. In an interesting contrast of organizational culture, the authors note strikingly different responses between the faculties of the two PDSs being studied, despite the fact that the two schools had similar resources, start-up processes, and structures.

There is still relatively little documentation of student impacts, and what is offered is usually buried amid other data. Judge and others (1995) report math scores gains of 45 percent in one urban elementary PDS in Michigan, and a tripling of persistence rates for ninth graders in another urban high school PDS. Wiseman and Cooner (1996) describe similar dramatic gains in writing scores on state achievement tests as a result of a "writing buddies" program in the PDS. Understanding how many of these gains are attributable to being in a PDS are, of course, difficult, due to the lack of effective comparison groups. Devlin-Scherer and others (1997) try to remedy this by documenting effects of innovative approaches to mathematics teaching on urban students in a PDS by using a matched-pair comparison group of students in non-PDS environments. Yet as Abdal-Haqq (1997a) notes in her careful review of current impact documentation reports, even these examples of impacts on student learning are brief references, typically, as she points out, just a few lines in the midst of a long report.

Other efforts that try to add a systematic conceptual approach to impact documentation includes the work of researchers involved with the Benedum Collaborative, involving the University of West Virginia and schools in four counties. Hoffman, Reed, and Rosenbluth (1997) conclude their edited book *Lessons from Restructuring Experiences* with a strong section on the "Outcomes of Restructuring: Problems and Possibilities." In one chapter, Saab, Steel, and Shive (1997) focus on classroom impacts, first noting the paucity in the literature of comprehensive documentation of PDS impacts on student learning. They describe a multi-pronged approach to data collection, including a teacher survey, teacher interviews, focus group interviews with students, and phone calls with a random sampling of parents. They include samples of

student work and parent responses, and describe how the data are being used to fine-tune the restructuring experience. Webb-Dempsey (1997) contributes a thoughtful chapter describing in detail the collaborative process Benedum used to gather and analyze data in a way that respected the needs and concerns of the participants while retaining a strong focus on getting credible data about impacts on experienced teachers, student teachers and students, and the schools themselves. Benedum draws on interviews with 400 students, and surveys of 3,000 students, evaluation data collected by the State Department of Education, as well as standardized tests. Hawthorne (1997) completes the set with his focus on the changes in the College of Education. He outlines four expectations for change that might result from PDS involvement, and then looks at the culture, the curriculum, and the research/scholarly activities of faculty and students as a way to document which changes have taken place. He concludes with a list of benchmarks that would indicate whether these changes are having a lasting impact on a college of education.

Another approach, that offers an integrated "conceptual map" to use multiple measures and perspectives on PDS impacts, is based in Massachusetts and connected to a state Department of Education-led consortium focusing on the improvement of the initial preparation of teachers. The conceptual framework for this, outlined in Teitel (in progress), argues that each of the several impacts expected in a PDS (increased learning for students, for preservice educators, and for experienced educators) must be documented using multiple measures and in a conceptually linked way. Documentation must go beyond self-report survey data, to include, for example, examination of portfolios and assessments by cooperating teachers and hiring principals. Furthermore, any changes documented in assessing improved learning by preservice of program graduates, should be carefully tied through a backward mapping process to changes in the learning experience for each of these target groups (e.g., changes in classroom and field placement experiences for student teachers), as well as to the organizational and cultural changes (different beliefs about teaching and learning, models, etc.) that are taking place to support them. The model is currently being used to assess impacts in three of the PDS partnerships in Massachusetts.

Conclusion

As the literature on professional development schools matures, the success stories roll in, along, as noted above, with the acknowledgment of the challenges of making these partnership work and of documenting their effectiveness. There seems to be some "taking stock" going on in the literature, with a number of authors expressing the need to revisit the roots and goals for PDSs, and to assess where PDS are, and where they are going. Some express the concerns mentioned above—that PDSs might reach a "plateau" as better cluster placements for student teachers, but not move further to simultaneous renewal (Teitel, forthcoming) or that PDSs have strayed from their initial purposes of providing equity in improving the achievements of urban students (Valli, Cooper & Frankes, 1997; Murrell, 1998). Other PDS advocates and evaluators suggest that now is a good time to look closely at PDSs to make sure that structural and organizational changes are leading to changes in the experiences of students, preservice teachers and experienced educators. For example, Myers (1996) argues that partnerships now spend less time addressing the nature of schools, ideas

about teaching and learning, and the knowledge base for teaching. He suggests that, instead, partnerships have been focusing heavily on developing and sustaining the inter-institutional partnership connections.

As PDSs grow and become more mainstream components of teacher education and school reform, it is essential to continue to have these discussions, in order to reassess where PDSs are going. The work of the PDS Standards Project can play an important part in this.

References

Abdal-Haqq, I. (1992a). Professional development schools: An annotated bibliography of selected ERIC resources. *Journal of Teacher Education 43* (1), 42-45.

Abdal-Haqq, I. (1992b). *Professional development schools. A directory of projects in the United States*. Clinical Schools Clearinghouse. Washington DC: American Association of Colleges for Teacher Education. (ERIC Document Reproduction Service No. ED 353 258)

Abdal-Haqq, I. (1995). *Professional development schools. A directory of projects in the United States*. Clinical Schools Clearinghouse. Washington DC: American Association of Colleges for Teacher Education.

Abdal-Haqq, I. (1997a). *Professional Development Schools: Weighing the evidence*. Thousand Oaks CA: Corwin Press.

Abdal-Haqq, I. (1997b). *Resources on professional development schools: An annotated bibliography and resource guide*. Washington DC: ERIC Clearinghouse on Clinical Schools, American Association of Colleges for Teacher Education.

Anderson, R. C. (1993). *Voices of change: A report of the clinical schools project*. (ERIC Document Reproduction Service No. ED 353 252)

Baker B.R. (1996). *The role of the professional development school to prepare teachers of young children. A description of two models: The Hillcrest professional development school and the LaVega primary school*. (ERIC Document Reproduction Service No. ED394 647)

Barbour, N. B., & Bersani, C. U. (1991). The campus child care center as a professional development school. *Early Childhood Research Quarterly, 6* (1), 43-49.

Barnhart, M., Cole, D., Hansell, S., Mathies, B., Smith, W., & Black, S. (1995). Strengthening teacher education. In R. Osguthorpe et al. (Eds.), *Partner schools: Centers for educational renewal* (pp. 45-71). San Francisco: Jossey-Bass.

Beglau, M., & Granger, K. (1995). Initiating district wide change. In R. Osguthorpe et al. (Eds.), *Partner schools: Centers for educational renewal* (pp. 167-188). San Francisco: Jossey-Bass.

Benton, G. J., & Richardson, G. (1993). A professional development school's impact on student teachers' attitudes. Paper presented at the annual meeting of the American Educational Research Association, Atlanta, GA. (ERIC Document Reproduction Service No. ED 374 077)

Berkeley, T. R.; & others (1997). *A focus on development and change: Professional development, partnership commitment*. (ERIC Document Reproduction Service No. ED405339)

Berry, B., & Catoe, S. (1994). Creating professional development schools: Policy and practice in South Carolina's PDS initiatives. In L. Darling-Hammond (Ed.), *Professional development schools: Schools for developing a profession* (pp. 176-202). New York: Teachers College Press.

Boles, K. (1994). Teacher leadership in PDS. *PDS Network News, 1* (3), 1-5.

Book, C. (1996) Professional development schools. In J. Sikula, T.J. Buttery, & E. Guyton (Eds.). *Handbook of research on teacher education* (2nd ed., pp.194-210). New York: Macmillan.

Brainard, F. (1989). Professional development schools: Status as of 1989 (Occasional Paper 9) Carnegie Forum for Education and Economy 1986 A Nation Prepared: Teachers for the 21st Century. New York: Carnegie Forum for Education and Economy. (ERIC Document Reproduction Service No. ED 338 568)

Brown, K. S.; & others (1996). *Co-laboring: The birth of a PDS partnership. Evaluation report of the Pattonville School District and Webster University professional development schools partnership.* (ERIC Document Reproduction Service No. ED406379)

Bullough, R. V., Jr., Kauchak, D., Crow, N., Hobbs, S., & Stokes, D. (1997). Professional development schools: Catalysts for teacher and school change. *Teaching and Teacher Education, 13* (2), 153-171.

Burke, W. I., & Galassi, J. P. (1997). *The Research Triangle Professional Development Schools Program: One response to the call for university-school education partnerships.* Unpublished manuscript, School of Education, University of North Carolina at Chapel Hill.

Cambone, J., Zambone, A., & Suarez, S. C. (1996, April). *Are they learning as we expected them to learn? An evaluation of the preparation of special education teachers using a professional development school model.* Paper presented at the annual meeting of the American Educational Research Association, New York. (ERIC Document Reproduction Service No. ED394 251)

Campbell, T. A., Strawderman, C., & Reavis, C. A. (1996). Professional development schools: Collaboration and change. *Teacher Education Quarterly 23* (2), 83-94.

Carnegie task force on teaching as a profession. (1986). *A nation prepared: Teachers for the 21st Century.* Washington, DC: author. Case, C. W., Norlander, K. A., & Reagan, T. (1993). Cultural transformation in an urban professional development center: Policy implications for school-university collaboration. *Educational Policy, 7* (1), 40-60.

Chase, S., Merryfield, M., & Chism (1996, April). *Bridging the gap between campus and school through collaboration in a professional development school network in social studies and global education.* Paper presented at the annual meeting of the American Educational Research Association, New York. (ERIC Document Reproduction Service No. ED404 304)

Christensen, M. & Serraro, S. (1997) Cooperating learning in a hostile environment. *Teaching and Change, 4* (2), 137-156.

Cifuentes, L.; & others (1996). *From sages to guides: A professional development study.* (ERIC Document Reproduction Service No. ED397 036)

Clark, R. (1997). *Professional development schools policy and financing: A guide for policymakers.* Washington, DC: AACTE.

Clark, R. (1995a). Evaluating partner schools. In R. Osguthorpe et al. (Eds.), *Partner*

schools: Centers for educational renewal (pp. 229-262). San Francisco: Jossey-Bass.
Clark, R. (1995b). Financing professional development schools. *PDS Network New, 2* (2), 1-5.
Clark, R. J. (1992). *Partner schools directory.* Seattle, WA: Center for Educational Renewal.
Clemson-Ingram, R. L., & Fessler, R. (1997). The Maryland redesign of teacher education: A commitment to system reform. *Action in Teacher Education, 19* (1), 1-15.
Clinard, L. M.; & others (1996). *Cooperating teachers reflect upon the impact of coaching on their own teaching and professional life.* (ERIC Document Reproduction Service No. ED390 843)
Collins, J. L. (1995). Listening but not hearing: Patterns of communication in an urban school-university partnership. In H. G. Petrie (Ed.), *Professionalization, partnership, and power: Building professional development schools* (pp. 77-92). Albany, NY: State University of New York Press.
Collinson, V. (1994, March). *Changing context for teachers' roles: Teachers as learners and leaders in universities, professional development schools and school districts.* Paper presented at the annual conference of the Association for Supervision and Curriculum Development, Chicago. (ERIC Document Reproduction Service No. ED 374 091)
Cook, J. (1996). Is Your School PDS Material? *Teaching Pre-K-8, 26* (5), 26-27.
Creek, R. J. (1995). The professional development school: Tomorrow's school or today's fantasy. In H. G. Petrie (Ed.), *Professionalization, partnership, and power: Building professional development schools* (pp. 241-252). Albany, NY: State University of New York Press.
Crow, N. A.; & others. (1996). *Masters cooperative program: An alternative model to teacher development in PDS sites.* Paper presented at the annual meeting of the American Educational Research Association in New York. (ERIC Document Reproduction Service No. ED399 223)
Cuban, L. (1987). The Holmes Group report: Why reach exceeds grasp. *Teachers College Record, 88* (3), 348-353.
Darling-Hammond, L. (1992). Accountability for professional practice. In M. Levine (Ed.), *Professional practice schools: Linking teacher education and school reform* (pp. 81-104). New York: Teachers College Press.
Darling-Hammond, L. (1994). *Professional development schools: Schools for developing a profession.* New York: Teachers College Press.
Darling-Hammond, L. (1994). Developing professional development schools: Early lessons, challenge and promise. In L. Darling-Hammond (Ed.), *Professional development schools: Schools for developing a profession* (pp. 1-27). New York: Teachers College Press.
Darling-Hammond, L., Cobb, V., & Bullmaster, J. (1995). Rethinking teacher leadership through professional development schools. *Elementary School Journal, 96* (1), 87-106.
De Bevoise, W. (1986). Collaboration: Some principles of the bridgework. *Educational Leadership 43* (5), 28-31.
Del Prete, T. & others. (1990). *Anna Maria CollegeCalvin Coolidge School professional development school guidebook.* Shrewsbury, MA: Anna Marie college and Shrewbury public schools. (ERIC Document Reproduction Service No. ED 349 266)

Derrington, M. L. (1995). *Evaluation of the Southwest Washington regional collaborative professional development schools project.* Vancouver, WA: Washington State University.

Devlin-Scherer, Wade; & others (1997). *The effects of student learning of transforming professional development schools to focus on national content standards.* (ERIC Document Reproduction Service No. ED406 350)

DeWert, M. H., & Cory, S. L. (1996). Becoming partners: building a school/university collaboration focused on teaching and learning with technology. *Journal of Computing in Teacher Education, 2* (3), 8-12.

Diem, R. A. (1992). Social studies, professional development, and reform: New challenges—new directions for the next century. *International Journal of Social Education, 7* (1), 100-104.

Dixon, P., & Ishler, R. (1992a). Acceptable approaches to alternative certification. *Teacher Education and Practice, 8* (1), 29-35.

Dixon, P., & Ishler, R. (1992b). Professional development schools: Stages in collaboration. *Journal of Teacher Education, 43* (1), 28-34.

Dodd, A. W. (1996). A very different kind of teacher education program: Professional development schools. *NAASP Bulletin, 80* (580), 30-37.

East Longmeadow School District—University of Massachusetts Amherst School of Education. (1991). Mentoring handbook. East Longmeadow, MA: Author. (ERIC Document Reproduction Service No. ED 338 571)

Ellsworth, J., & Albers, C. M. (1995). Tradition and authority in teacher education reform. In H. G. Petrie (Ed.), *Professionalization, partnership, and power: Building professional development schools* (pp. 159-176). Albany, NY: State University of New York Press.

Fear, K. et al. (1991, December). A critical analysis of collaboration within professional development schools. Paper presented at the annual meeting of the 41st National Reading Conference, Palm Springs, CA. (ERIC Document Reproduction Service No. ED 343 083)

Fessler, R. (1994, April). Proposal for redesigning teacher education in Maryland through school-university partnerships. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

Field, T. T. (1991, February). Toward a shared vision of education reform: Establishing professional development schools. Paper presented at the annual meeting of American Association of Colleges for Teacher Education, Atlanta, Ga. (ERIC Document Reproduction Service No. ED 337 426)

Fischetti, J. (1994, April). *Starting and sustaining a professional development school.* Presentation at the annual meeting of the American Educational Research Association, New Orleans, LA.

Forrest, L., & others. (1993). *Win/win restructuring: Counseling psychology collaboration with teacher education in professional development schools.* (ERIC Document Reproduction Service No. ED 370 889)

Frazier, C. M. (1994). Two education reform trains: Standards/assessment and simultaneous renewal. *Record in Educational Leadership, 14* (2), 15-17.

Gardner, D. P. & others.(1983). *A nation at risk: The imperative for educational reform. An open letter to the American people. A Report to the Nation and the Secretary of Education.* Washington, DC: Department of Education.

Gettys, C. & Ray, B. (1996). *Analysis of initial perception of the professional development school experience.* (ERIC Document Reproduction Service No. ED405 299)

Goodlad, J. (1994). The national network for educational renewal. *Phi Delta Kappan, 75* (8), 632-638.

Goodlad, J. (1990). *Teachers for our nation's schools.* San Francisco: Jossey Bass.

Goodlad, J. (1988). School-university partnerships for educational renewal: Rationale and concepts. In K. Sirotnik & J. Goodlad (Eds.), *School—university partnerships in action: Concepts, cases and concerns* (pp. 3-31). New York: Teachers College Press.

Gottesman, B., Graham, P., Caldwell, B., Winecoff, S., Ferrante, R. A., & Nogy, C. (1994). The big picture: The South Carolina collaborative to renew teacher education. *Record in Educational Leadership, 14 (2),* 67-77.

Grau, I.. IV. (1996, January). *Teacher development in technology instruction: Does computer coursework transfer into actual teaching practice?* Paper presented at the annual meeting of the Southwest Educational Research Association, Dallas, TX. (ERIC Document Reproduction Service No. ED394 949)

Gross, S. (1993). Constructing teaching and research practice in elementary school mathematics. Elementary Subjects Centra Series (92). (ERIC Document Reproduction Service No. ED 364 405)

Grossman, P. (1994). In pursuit of a dual agenda: Creating a middle level professional development school. In L. Darling-Hammond (Ed.), *Professional development schools: Schools for developing a profession* (pp. 50-73). New York: Teachers College Press.

Haberman, M. (1992). Alternative certification: Can the problems of urban education be resolved by traditional teacher education? *Teacher Education and Practice, 8* (1), 13-27.

Harris, C., & Harris, M. (1995). Launching and sustaining a partner school. In R. Osguthorpe et al. (Eds.), *Partner schools: Centers for educational renewal* (pp. 127-165). San Francisco: Jossey-Bass.

Hawthorne, R. (1997). Impact on Colleges of Education. In N. Hoffman, W. Reed, & G. Rosenbluth (Eds.), *Lessons from restructuring experiences: Stories of change in professional development schools.* (pp. 295-322). Albany: SUNY Press.

Hecht, J. B.; & others (1996). *Professional development school 1995-96. A research report.* (ERIC Document Reproduction Service No. ED404 306)

Higgins, K., & Merickel, M. L. (1997). The promise and the promises: Partnerships from a university Perspective. *Teacher Educator, 32* (3), 165-184.

Hoffman, N., Reed, W., & Rosenbluth, G. (1997) (Eds.) *Lessons from restructuring experiences: Stories of change in professional development schools.* Albany: SUNY Press.

Holmes Group. (1986). *Tomorrow's teachers: A report of the Holmes Group.* East Lansing, MI: Author.

Holmes Group. (1990). *Statement of principles; Tomorrow's schools: Principles for the design of professional development schools.* East Lansing, MI: Author.

Holmes Group. (1995). *Tomorrow's schools of education.* East Lansing, MI: Author.

Houston, H. (1992). Institutional standard-setting in professional practice schools: Initial considerations. In M. Levine (Ed.), *Professional practice schools: Linking teacher education and school reform* (pp. 124-132). New York: Teachers College Press.

Hunkins, F., Wiseman, D., & Williams, R. (1995). Supporting collaborative inquiry. In R. Osguthorpe et al. (Eds.), *Partner schools: Centers for educational renewal* (pp. 99-123). San Francisco: Jossey-Bass.

Icabone, D. (1992). Criteria for involvement in professional development schools. In C. Woloszyk & S. Davis (Eds.), *Professional development school handbook.* Kalamazoo, MI: Western Michigan University, College of Education.

Jenlins, P., & Crowell, R. (1992). Administrative structures to implement professional development schools. In C. Woloszyk & S. Davis (Eds.), *Professional development school handbook.* Kalamazoo, MI: Western Michigan University, College of Education.

Jett-Simpson, M. (1992, April). Portrait of an urban professional development school. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA. (ERIC Document Reproduction Service No. ED 351 285)

Johnston, M. (1997). *Contradictions in collaboration: New thinking on school/university partnerships.* New York: Teachers College Press.

Judge, H., Carriedo, R., & Johnson, S. M. (1995). Professional development schools and MSU The report of the 1995 review. (Available online: http://35.8.168.203/kiosk/PDS_Rpt.html; also Professional Development Schools, 513 Erickson Hall, East Lansing, NU 48824)

Kennedy, M. M. (1990). Professional development schools. *NCRTE Colloquy 3* (2). (ERIC Document Reproduction Service No. ED 326 516)

Kimball, W., Swap, S., LaRosa, P., & Howick, T. (1995). Improving student learning. In R. Osguthorpe et al. (Eds.), *Partner schools: Centers for educational renewal.* San Francisco: Jossey-Bass.

King, A. R. Jr., & Mizoue, Y. (1993). A case for university based professional development and experimental schools: Japanese and American perspective. *Peabody Journal of Education, 68* (3), 6779.

King, I. et al. (1993, February). Working together toward excellence in teacher education. Paper presented at the annual meeting of the Association of Teacher Educators, Los Angles, CA. (ERIC Document Reproduction Service No. ED 361 283)

Klaumeier, R. L. (1990). Four decades of calls for reform of teacher education: The 1950s through the 1980s. *Teacher Education Quarterly, 17* (4), 23-64.

Kleinhammer-Tramhill, P. J.; & others (1996). *Statewide system change in teacher education: A formative evaluation of Kansas project partnership.* (ERIC Document Reproduction Service No.ED395 925)

Kozleski, E., & others. (1997a). Evaluating partnership: A robust approach to improving partnerships. In *Partnerships for learning: Real issues and real solutions.* (Monograph Series *II*, No. 1.). Oshkosh WI: Teacher Education Council of State Colleges and Universities.

Kozleski, E., & others. (1997b, March 25). Studying partnership through empowerment evaluation: A statewide view. Paper presented at the Annual Meeting of the American Educational Research Association.

Kroll, L.; & others. (1997). The effect of a school-university partnership on the student teaching experience. *Teacher Education Quarterly, 24* (1) 37-52.

Kyle, R. (1993). Transforming our schools: Lessons from Jefferson County Public

Schools/Gheens Professional Development Academy, 1983-1991. Louisville, KY: Gheens Foundaation, Jefferson County Public Schools. (ERIC Document Reproduction Service No. ED 358 176)

Labaree, D. (1991, April). Doing good, doing science: The Holmes Group reports and the rhetoric of educational reform. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

Lakebrink, J. (1991, April). Teacher preparation in professional development schools. Paper presented at the annual meeting of the American Educational Research Association, Atlanta, GA. (ERIC Document Reproduction Service No. ED 330 689)

Larkin, E., & Troen, V. (1995). College-school-community partnerships as a medium for redesigning teacher education programs and school practices. *Record in Educational Leadership, 15* (2), 100-104.

Lawson, H.A. (1996). Expanding the Goodlad agenda: Interprofessional education and community collaboration in service of vulnerable children, youth and families. *Holistic Education Review, 9* (1) 20-34.

Levin, R. A. (1990, November). *An unfulfilled alliance. The lab school in teacher education: Two case studies 1910-1980.* Paper presented at the annual meeting of the History of Education Society, Atlanta. (ERIC Document Reproduction Service No. ED 327 487)

Levine, M. (Ed.). (1992). *Professional practice schools: Linking teacher education and school reform.* New York: Teachers College Press.

Levine, M., & Trachtman, R. (Eds.). (1997). *Making professional development schools work: Politics, practice and policy.* New York: Teachers College Press.

Lieberman, A., & Miller, L. (1992). Teacher development in professional practice schools. In M. Levine (Ed.), *Professional practice schools: Linking teacher education and school reform* (pp. 105-123). New York: Teachers College Press.

Long, J. (1995, February). *Research analysis of professional development school graduates and traditional phase I and phase II graduates.* Paper presented at the annual meeting of the Association of Teacher Educators, Detroit. (ERIC Document Reproduction Service No. ED382 570)

Loving, C., Wiseman, D., Cooner, D., Sterbin A., & Seidel, S. (1997, March 26). *The evolution of a research design: Evaluating professional development schools in the NEA teacher education initiative.* Paper presented at the Annual Meeting of the American Educational Research Association.

Lythcott, J., & Schwartz, F. (1994). Professional development in action: An idea with visiting rights. In L. Darling-Hammond (Ed.), *Professional development schools: Schools for developing a profession.* New York: Teachers College Press.

MacNaughton R., & Johns, F. (1993). The professional development school: An emerging concept. *Contemporary Education, 64* (4), 215-218.

Mays, J., & Pollard, J. (1993). *Network, regional policy analysts and advisors.* Austin, TX: Southwest Edcuation Development Lab. (ERIC Document Reproduction Service No. ED 367 591

Maryland Higher Education Commission (1995). *Teacher education task force report.* Baltimore, NM: Author.

McCarthy, S., & Peterson, P. (1993). Creating classroom practice within the context of a restructured professional development school. In D. Cohen, M. McLaughlin, & J. Talbert (Eds.), *Teaching for understanding: Challenges for*

policy and practice. San Francisco: Jossey-Bass.
McDaniel, E. (1993). Computers and school reform. *Educational Technology, Research and Development, 4* (1), 73-78.
McDevitt, M. A. (1996). A virtual view: Classroom observation at a distance. *Journal of Teacher Education, 47*(3), 191-195.
McGowan, T., & Powell, J. (1993, April). In search of autonomy: Teachers' aspirations and expectations from a school-university collaborative. Paper presented at the annual meeting of the American Educational Research Association, Atlanta, GA. (ERIC Document Reproduction Service No. ED 359 890)
Mehaffy, G. (1992, February). *Issues in the creation and implementation of a professional development school*. Paper presented at the annual meeting of the AACTE, San Antonio. (ERIC Document Reproduction Service No. ED 346 031)
Miller, L., & O'Shea, C. (1994). *Partnership: getting broader, getting deeper.* New York: Teachers College Press.
Miller, L., & Silvernail, D. (1994). Wells Junior High School: Evolution of a professional development school. In L. Darling-Hammond (Ed.), *Professional development schools: Schools for developing a profession.* New York: Teachers College Press.
Minnesota State Board of Teaching. (1994). *Developing a residency program as part of teacher licensure*. A report in accordance with Minnesota statutes. 1993 Supplement. Section 125.230, SUBD. 7.(b). St. Paul: Author. (ERIC Document Reproduction Service No. ED381 488)
Moore, K., & Hopkins, S. (1993). Professional development schools: Partners in teacher preparation. *Contemporary Education, 64* (4), 219-222.
Moore, K.D & Looper, S. (1997). Teacher preparation: A collaborative model. *Teacher Educator, 32* (3), 152-164.
Morris, V., & Nunnery, J. A. (1993). *Teacher empowerment in a professional development school collaborative: Pilot assessment*. Memphis, TN: Memphis State University, Center for Research in Educational Policy. (ERIC Document Reproduction Service No. ED 368 678)
Murray, F. (1993). All or none—Criteria for professional development schools. *Educational Policy, 7* (1), 61-73.
Murrell, P. C., Jr., & Borunda, M. (1997). *The cultural and community politics of educational equity: Towards a new framework of professional development schools.* Unpublished manuscript, National Center for Restructuring Education, Schools, and Teaching, Teachers College, Columbia University.
Murrell, P. (1998). *Like stone soup: The role of the professional development school in the renewal of urban schools*. Washington DC: American Association of College for Teacher Education.
Myers, C. B. (1996, April). *Beyond the PDS: Schools as professional learning communities. A proposal based on an analysis of PDS efforts of the 1990s.* Paper presented at the annual meeting of the American Educational Research Association, New York. (ERIC Document Reproduction Service No. ED400 227)
NCREST (1993). Vision statement. *PDS Network News, 1* (1), 3-4.
Neufeld, B. (1992). Professional practice schools in context: New mixtures of institutional authority. In M. Levine (Ed.), *Professional practice schools: Linking teacher education and school reform* (pp. 133-169). New York: Teachers College Press.
Neufeld, B., & Haavind, S. (1988). *Professional development schools in Massachu-*

setts: Beginning the process. (ERIC Document Reproduction Service No. ED 341 649)

Norlander, K., Case, C., Meagher, J., & Reagan, T. (1992). *Teacher preparation at the University of Connecticut.* Storrs, CT: School of Education, University of Connecticut.

Osguthorpe, R. T., Harris, C. R., Harris, M., & Black, S. (1995). *Partner schools: Centers for educational renewal.* San Francisco: Jossey-Bass.

O'Shea, M., Taylor, M., & Foster, J. (1994). Barriers and breakthroughs to educational renewal at Metropolitan State College. *Record in Educational Leadership, 14* (2), 32-36.

Paul, J., et al. (1993). Changing the way we do our business: One department's story of collaboration with public schools. *Teacher Education and Special Education, 16* (2), 95-109.

Peterson, N. S.; Facemyer, K. C. (1996). The impact of the internet of learners and schools. *NAASP Bulletin, 80* (582), 53-58.

Petrie, H. G. (Ed.). *Professionalization, partnership, and power: Building professional development schools.* Albany, NY: State University of New York Press.

Pinnegar, S., & Smith, M. J. (1992). Nature of school and university partnerships. In C. Woloszyk & S. Davis (Eds.), *Professional development school handbook.* Kalamazoo, MI: Western Michigan University, College of Education. (ERIC Document Reproduction Service No. ED 352 319)

Professional development school programs in serious emotional disturbance at Marshall Road Center and Pathways/Hyattsville. (n.d.). Unpublished project description. (Available from Department of Teacher Preparation and Special Education, The George Washington University, Washington, DC)

Pugach, M, & others. (1991). Changing the practice of teacher education: The role of the knowledge base. Washington, DC: AACTE. (ERIC Document Reproduction Service No. ED 339 680)

Pugach, M.C., & Pasch, S.H. (1994). The challenge of creating urban professional development schools. In R. Yinger & K. N. Borman (Eds.), *Restructuring education: Issues and strategies for communities, schools and universities.* Creskill, NJ: Hampton Press.

Putnam, J. (1991, April). Initiating conversation at a professional development school. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL. (ERIC Document Reproduction Service No. ED 370 891)

Rafferty, C., (1994, April). Promoting multi-site collaborative inquiry: Initial efforts and challenges. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA. (ERIC Document Reproduction Service No. ED 369 320)

Rakow, S. J., & Robinson, L. W. (1997). School and university partnerships: Teaming for success. *Contemporary Education, 68* (2), 143-147.

Reagan, T. G., Norlander, K. A., Case, C. W., & Brubacher, J. W. (1994). Teachers for Connecticut's schools: Postulates, problems and potential at the University of Connecticut. *Record in Educational Leadership, 14* (2), 27-31.

Reck, M. (1992, June). *Toward developing campus strategies for preparing teachers for the new American school.* Paper presented at the conference for Teach America: Teacher preparation for the news American school. (ERIC Document

Reproduction Service No. ED 355 176)
Reed, C. (1996, February). Institutionalization of the urban teacher education program. Paper presented at the PDS Pre-Conference of the annual meeting of the American Association of Colleges for Teacher Education. Chicago, IL.
Richardson Foundation. (1993). The professional development school: A common sense approach to improving education. Fort Worth, TX: Author. (ERIC Document Reproduction Service No. ED 355 233)
Richmond, G. (1996). University/school partnerships: Bridging the culture gap. *Theory into Practice, 35* (3), 214-18.
Robinson, E. L. (1996). Involving the school psychologist. How to break the barriers to collaboration on professional development school leadership teams. *Teacher Education and Practice, 12* (2), 1-15.
Robinson, S., & Darling-Hammond, L. (1994). Change for collaboration and collaboration for change: Transforming teaching through school-university partnerships. In L. Darling-Hammond (Ed.), *Professional development schools: Schools for developing a profession.* New York: Teachers College Press.
Roper, S., & Davidman, L. (1994). The university center for teacher education: An organizational catalyst for change. *Record in Educational Leadership, 14* (2), 23-26.
Roth, K. et al. (1993). Entryways into science and science teaching: Teacher and researcher development in a professional development school. (Series no. 84). East Lansing, MI: Michigan State University. (ERIC Document Reproduction Service No. ED 361 173)
Ruscoe, G. et al. (1989). Quantitative and qualitative perspectives on teacher attitudes in professional development schools. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA. (ERIC Document Reproduction Service No. ED 310 068)
Rushcamp, S., & Roehler, L. (1992). Characteristics supporting change in a professional development school. *Journal of Teacher Education, 43* (1), 19-27.
Russell, P., & Harris, L. B. (1996). *Creating a Systemic Transformation of Pre-Service Teacher Preparation.* (ERIC Document Reproduction Service No. ED393 841)
Saab, J., Steel, S., & Shive, J. (1997). Teachers' perspectives on school change: Lessons from the classroom. In N. Hoffman, W. Reed, &G. Rosenbluth, (Eds.) *Lessons from restructuring experiences: Stories of change in professional development schools* (pp. 245-267). Albany: SUNY Press.
Sagmiller, K., & Gehrke, N. (1992). *An historical-ethnographic study of an emerging professional development school.* (ERIC Document Reproduction Service No. ED 347 142)
Schack, G., & Overturf, B. (1994). Professional development teams: Stepping stone -or next best thing—to professional development schools. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA. (ERIC Document Reproduction Service No. ED 374 090)
Schaefer, R. J. (1967). *The school as a center of inquiry.* New York: Harper & Row.
Schlechty, P. C. (1988). Inventing professional development schools. *Educational Leadership, 46* (3), 28-31.
Seidman, E. et al. (1991). East Longmeadow School District—University of Massa-

chusetts at Amherst professional development school: A collaborative effort. Amherst, MA: University of Massachusetts, School of Education. (ERIC Document Reproduction Service No. ED 338 572)

Sewell, T. E., Shapiro, J. P., Ducett, J. P., &. Sanford, J. S. (1995). Professional development schools in the inner city: Policy implications for school-university collaboration. In H. G. Petrie (Ed.), *Professionalization, partnership, and power: Building professional development schools* (pp. 179-198). Albany, NY: State University of New York Press.

Sharp, T. (1992). Teacher preparation—a professional development school approach. *Journal of Physical Education, Recreation and Dance, 63* (5), 82-87.

Shen, J. (1994, April). A study in contrast: Visions of preservice education in context of a professional development school. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA. (ERIC Document Reproduction Service No. ED 368 677)

Sirotnik, K. A. (1988). The meaning and conduct of inquiry in school-university partnerships. In K. A. Sirotnik & J. I. Goodlad (Eds.), *School-university partnerships in action.* New York: Teachers College Press.

Sirotnik, K. A., & J. I. Goodlad (Eds.). (1988). *School-university partnerships in action.* New York: Teachers College Press.

Snyder, J. (1994). Perils and potentials: A tale of two professional development schools. In L. Darling-Hammond (Ed.), *Professional development schools: Schools for developing a profession.* New York: Teachers College Press.

Stallings, J. A. (1991). Connecting preservice teacher education and inservice professional development: A professional development school. Paper presented at the annual meeting of American Association of Colleges for Teacher Education, Chicago, IL. (ERIC Document Reproduction Service No. ED 339 682)

Stallings, J. A. et al. (1990). Houston Teaching Academy: Partnership in developing teachers. *Teaching and Teacher Education, 6* (4), 355-365.

Stallings, J. A., & Wiseman, D. L. (1994). Teacher education restructuring—Guided by the postulates. *Record in Educational Leadership,* 14 (2), 78-81.

Stallings, J. A., Wiseman, D. L., & Knight, S. L. (1995). Professional development schools: A new generation of school-university partnerships. In H. G. Petrie (Ed.), *Professionalization, partnership, and power: Building professional development schools* (pp. 133-144). Albany, NY: State University of New York Press.

Stevenson, R. (1993). Critically reflective inquiry and administrator preparation: Problems and possibilities. *Educational Policy, 7* (1), 96-113.

Stoddart, T. (1993). The professional development school: Building bridges between cultures. *Educational Policy, 7* (1), 5-23.

Swap, S. M. (1994). Preparing students to teach all the nation's children. *Record in Educational Leadership, 14* (2), 4144.

Sykes, G. (1997). Worthy of the name: Standards for the professional development school. In M. Levine & R. Trachtman (Eds.), *Making professional development schools work: Politics, practice and policy* (pp. 159-181). New York: Teachers College Press.

Teitel, L. (1992). The impact of professional development school partnerships on the preparation of teachers. *Teaching Education, 4* (2), 77-85.

Teitel, L. (1993) The impact of professional development school partnerships on teacher preparation institutions. *PDS Network News, 1* (2), 1,4.

Teitel, L. (1994). Can school-university partnerships lead to the simultaneous renewal of schools and teacher education? *Journal of Teacher Education, 45* (4), 245-252.

Teitel, L. (1996). *The transformation of school leadership in professional development schools.* New York: National Center for Restructuring Education, Schools and Teaching.

Teitel, L. (1998). Separations, divorces and open marriages in professional development school partnerships. *Journal of Teacher Education, 49* (2), 85-96.

Teitel, L. (1998, April 14). *Research on impacts of professional development schools: a methodological review.* To be presented at the annual meeting of the American Educational Research Association in San Diego.

Teitel, L. (1997). The organization and governance of professional development schools. In M. Levine & R. Trachtman (Eds.), *Making professional development schools work: Politics, practice and policy* (pp. 115-133). New York: Teachers College Press.

Teitel, L. (forthcoming) Changing teacher education through professional development school partnerships: A five year follow-up study. *Teachers College Record.*

Teitel, L., & Del Prete, T. (1995). *Creating a PDS partnerships: A resource guide.* Boston: Massachusetts Field Center for Teaching and Learning, University of Massachusetts.

Telese, J. A. (1996). *Field-based interns' philosophical perspectives on teaching.* (ERIC Document Reproduction Service No. ED402 283)

Theobald, N. D. (1991). Staffing, financing, and governing professional development schools. *Educational Evaluation and Policy Analysis, 13* (1), 87-101.

Torres, R. (1992). Evaluation of the professional development school effort. In C. Woloszyk & S. Davis (Eds.), *Professional development school handbook* . East Lansing, MI: Michigan State University. (ERIC Document Reproduction Service No. ED 352 319)

Trachtman, R., & Levine, M. (1994). Reinventing leadership for professional development schools. *PDS Network News, 1* (4), 1-7.

Valli, L., Cooper, D., & Frankes, L. (1997). Professional development schools and equity: A critical analysis of rhetoric and research. In M. W. Apple (Ed.), *Review of research in education 22* (pp. 251-304). Washington, DC: American Educational Research Association.

Van Zandt, L. M. (1996). *Assessing the effects of reform in teacher education: An evaluation of the MAT program at trinity university.* (ERIC Document Reproduction Service No. ED394 954)

Waters, L. (1993). *Lessons learned in the creation of an urban professional development school.* (ERIC Document Reproduction Service No. ED 356 195)

Webb-Dempsey, J. (1997). Reconsidering assessment to be reflective of school reform.In N. Hoffman, W Reed, & G. Rosenbluth, (Eds.) Lessons from restructuring experiences: Stories of change in professional development schools (pp. 269-294). Albany: SUNY Press.

Whitford, B. (1994). Permission, persistence and resistance: Linking high school restructuring with teacher education reform. In L. Darling-Hammond (Ed.), *Professional development schools: Schools for developing a profession.* New York: Teachers College Press.

Wilder, M. A. (1995). Professional development schools: Restructuring teacher education programs and hierarchies. In H. G. Petrie (Ed.), *Professionalization,*

partnership, and power: Building professional development schools (pp. 253-268). Albany, NY: State University of New York Press.

Williams, R. (1993). A professional development school initiative: Indiana State University story. *Contemporary Education, 64* (4), 210-214.

Wiseman, D. (1993). Inquiry process in the Texas A & M University—Jane Long Middle School partnership. Paper presented at the annual meeting of the American Educational Research Association, Atlanta, GA.

Wiseman, D. L., & Cooner, D. (1996). Discovering the power of collaboration: The impact of a school-university partnership on teaching. *Teacher Education and Practice, 12* (1), 18-28.

Woloszek, C. (1992). *A study of school climate in a secondary professional development school*. East Lansing, MI: Michigan State University. (ERIC Document Reproduction Service No. ED 346 026)

Woloszyk, C., & Hill, R. (1994, April). *Restructuring teacher preparation: Seminar and related activities within a secondary professional development school*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA. (ERIC Document Reproduction Service No. ED 374 076)

Woloszyk, C., & Davis, S. (1992). *Professional development school handbook*. (ERIC Document Reproduction Service No. ED 352 319)

Yerian, S. Y., & Grossman, P. L. (1993, April). *Emerging themes on the effectiveness of teacher preparation through professional development schools*. Paper presented at the annual meeting of the American Educational Research Association, Atlanta, GA.

Zeichner, K., & Miller, M. (1997). Learning to teach in professional development schools. In M. Levine & R. Trachtman (Eds.), *Making professional development schools work: Politics, practice and policy* (pp. 15-32). New York: Teachers College Press.

The NCATE Professional Development School Study

A Survey of 28 PDS Sites

Roberta Trachtman

The theoretical literature suggests that in professional development schools (PDSs), school- and university-based teachers and administrators work to support active student learning; to provide a professional induction program for new teachers; to develop the skills, knowledge, and dispositions of practicing teachers; and to initiate a systematic process for inquiring about practice to improve it. In these schools, teachers and administrators are deliberately and systematically changing the way in which they and their students work. Many believe that professional development schools represent a key strategy for simultaneously advancing school reform and reform in teacher education.

Research Design

In 1995, the National Council for Accreditation of Teacher Education (NCATE) received a two-year grant from the AT&T Foundation to create developmental standards for professional development schools. As a first step toward this goal, we sought to develop a consensus about mission and good practice in PDSs. We developed a two-stage process for drawing on the knowledge acquired by the community of experts who have designed and implemented more than 200 schools in the last several years. To understand how participants in *highly developed* sites do their work, we wanted to identify them and ask them about their purposes and practices. Throughout this process of discovery, however, we held fast to Lightfoot's (1983) earlier finding that "goodness is imperfect and changing" (p. 24).

Stage I: Identifying the Sites

During spring 1995, the project assembled a small group of PDS practitioners and stakeholders to develop a process for finding highly developed sites. Meeting participants recommended that we throw out a wide net to capture the work of both the high profile and the less well known professional development schools. In response to this advice, in July we sent "letters of nomination" to 265 individuals in the following groups:

- the NCATE PDS Standards Project National Advisory Group,
- land-grant college deans,
- Ford Foundation clinical schools,
- AT&T Teachers for Tomorrow sites,
- National Education Association (NEA teacher education initiatives),
- National Network for Educational Renewal (NNER) partner schools,
- the National Center for Restructuring Education, Schools, and Teaching

(NCREST) core group,
- the American Association of Colleges of Teacher Education (AACTE) Clinical Schools Clearinghouse survey mailing list,
- participants in the Spring Sturbridge Conference (Northeast Regional PDS Network),
- Holmes Group members expressing interest in the project, and
- individuals asking for more information about the project

We asked these individuals to nominate PDS sites that were "highly developed" in four areas: (1) teacher education, (2) school renewal, (3) continuing professional development, and (4) inquiry directed at improving practice. (Over time, these four PDS goals had emerged from the theoretical, conceptual, and case-study literature.) Further, we asked nominators to offer evidence about the ways in which participants at the PDS site had been working. We asked that each nominator provide examples for (1) how the school and university partners were working to achieve collaboration and parity; (2) how the university and the school were changing through the development of the PDS; (3) how the partners were developing a shared, learner-centered view of teaching; and (4) how the site was addressing issues of equity. We later used these "evidentiary" data to select the sample sites.

Response rate and response bias

By the end of August we had received responses from 59 individuals. When we checked for response bias, we discovered that we had heard from only 22 percent of the respondents and that many responses came from members of the same group. Consequently, we sent a second mailing to all those from whom we had not yet heard. We received an additional 28 responses from the second mailing, which brought the combined response rate to 33 percent. We noted, however, that some groups, including the NCATE advisors, NEA, NNER partners, Holmes, AACTE, and the land-grant college deans, sent in many more responses than did others.

The weighting process

Respondents forwarded 169 nominations of PDS sites that they believed were highly developed. We ranked these nominations according to a scoring rubric developed from the nominating form. Since we had asked each nominator to identify whether the PDS was meeting one or more of the four goals, and to provide evidence for how each goal was being met, we gave the nominees one point for each of these eight items. We selected the top 41 scores for our sample.

Limits to the peer nomination process

Although reputation sampling is often a useful strategy in exploratory research (see Johnson's description, 1990), the process has several limitations. In this study, nominators were permitted to nominate themselves and frequently they did. Some respondents told us that they were uncomfortable nominating others because they did not know enough about them. Further, the names of all nominees did not come to us in exactly the same way. We included the nominees from the national advisory group in the sample, although all advisors had not completed peer nomination forms and so we could not weigh their choices against the scoring rubric. However, because almost

all advisory group members had extensive, firsthand knowledge of PDS work, we decided that their nominees should receive at least as much weight as the nominees with the highest "scores."

The sample emerges

Although we do not suggest that this sample is statistically representative of all PDS sites, we know that the sample reflects all regions of the country; all school levels (elementary, middle, and high schools); and small, medium, and large public and private colleges and universities. Further, we also know that the national PDS networks (Holmes, NEA, NCREST, NNER) are all represented in this sample.

Project staff called the contact people who had been identified during the peer nomination process. Some contacts were school-based, some were university-based, and a few were in the school district office. During the call, project staff explained the process by which sites with highly developed practices had been selected. In addition, each site was offered a rare incentive—on completion of the survey, two site members would be invited to participate in a national conference dedicated to informing the NCATE PDS standards process. Further, their expenses for this meeting would be paid by NCATE.

Among the 41 sites selected, three did not respond to repeated telephone messages. Of the remaining 38 sites, six did not return the survey, and four other surveys either were incomplete or arrived too late for inclusion in the analysis. The analysis, therefore, relies on data from 28 PDSs, which gives us a final response rate of 68 percent.

Stage 2: Designing the Instrument

We began the process of developing a data-collection instrument by working backward from our research purposes. Since the final goal of our project was to develop standards related to good practices in PDSs, we needed to identify examples of good practices. We needed to know what goals the participants had set, how they were working to meet those goals, what they saw as supporting and constraining conditions, and how they measured their progress toward goal attainment. Further, we wanted to know if their practices were informed by unique or particular beliefs. Although we knew that our questions could best be answered in face-to-face conversations and site visits, the usual resource constraints—time and money—prevented us from using that approach.

We chose, instead, to create an open-ended questionnaire that would allow participants to "talk" to us by talking with one another. We sent each PDS a three-part questionnaire and asked that the school- and university-based participants sit down together for a few hours to think and write about these questions. The first part of the questionnaire had eight sections, each of which represented one of the goals or "commitments" identified in the theoretical and conceptual literature as being important to participants in professional development schools. Each section had additional prompt questions and a set of categories to help participants frame their answers.

The second part of the questionnaire focused on finance issues. We wanted to know how participants in professional development schools spend money and what the sources of their funds are.

The third part asked for demographic data[1] about the professional development school.

Pilot test

The PDS site in Howard County, Maryland, a partnership with the teacher education program at Johns Hopkins University, agreed to pilot test the questionnaire. The pilot group suggested ways for clarifying questions and tightening up the format. We forwarded draft copies to NCATE Advisory Committee members, who made some additional formatting suggestions. For the most part, the pilot test confirmed our belief in the value of the questions and the power of the process.

Stage 3: Data Analysis and Presentation

The PDS participants approached this task seriously. They sent responses ranging from ten to fifty typed pages. Several sites sent additional documents with their completed questionnaires. We sought to analyze these huge data sets by drawing on Miles and Huberman's approaches to multisite data analysis (1994). We looked both within and across sites to make sense of the practices and beliefs of participants in highly developed PDSs.

Counting the practices and beliefs

We began the process of data analysis by listing the practices described by participants and analysts in the PDS literature. We identified their presence in each survey, and then we counted how many sites reported their engagement in these activities or described their work in terms of these beliefs. Given our sample size of 28, we created a "presence rubric," with seven or fewer mentions representing low presence, eight through 21 mentions representing medium presence, and 22 through 28 mentions as examples of high presence. While reading the responses, we also created a list of those practices and beliefs that had not yet received significant attention in earlier reports. These additional items became part of our analysis, too.

The practices discussed in this text are those that reflect medium or high presence in the PDS narratives. The charts in the Appendix were created from the demographic data. In the final section, the changes reported by PDS participants are used as examples of the outcomes associated with PDS work. Clearly, these data do not allow for a cause-and-effect analysis. However, I see some important connections among what people do, how they think about their work, and what changes they describe.

Findings and Analysis: Part I

The four PDS goals were used as the organizing framework for data presentation and analysis. However, because of the interrelationships among the goals, there was some difficulty separating the data into neat categories. It is assumed that this is what happens in the work as well and that the "overlaps" provide participants with additional learning opportunities.

PDS Goal 1: Support Student Learning

The work of students

In PDS classrooms characterized by "ambitious teaching" or "teaching for understanding," teachers no longer hold all the information. As learners begin to take responsibility for knowledge construction, they turn to one another and to new

classroom technologies to answer their questions. In these constructivist classrooms, students engage in an array of new roles, including peer-helper and caregiver, curriculum negotiator, and self- and peer-evaluator.

In several PDS sites, survey respondents defined student learning as "inquiry," with descriptions clearly beyond the rhetorical. Participants described how children in PDS classrooms were expected to work independently on difficult tasks, engage in inquiry-based projects, and use technology to create knowledge. For example, one site provided a vivid analysis of how elementary students conducted a collaborative research project by using the Internet as a research tool and hypermedia as a presentation mode to demonstrate evidence of their learning. Another PDS reported that it is a beta site for a technology initiative. In others, the theme of student-centered learning was reflected in the ways in which participants were using "a writing process approach" to give children an opportunity to develop their own voices. The paradigm of teaching for understanding seemed neatly summarized by one PDS site when participants wrote, "We stress personal student investigation and try to encourage the students to become responsible leaders in their individual learning experiences."

Focusing on each child

Across the PDSs, participants described their belief that all children can learn. As they have worked toward making real their espoused commitment to educating all, they have had to confront children's unique learning needs. As described by many PDS participants, they have shifted their attention away from thinking about the whole class to thinking about each member of the class; they have begun to move from a philosophy of teaching all students to a philosophy of teaching each one. In meeting this goal, participants have had to restructure classroom time, reconfigure teachers' roles, and reinvent curriculum and instructional approaches. In some PDSs, the decision to include special needs children inside the regular classroom has brought together adults—teachers, paraprofessionals, and parents—in unprecedented ways. At another site, by making a "conscious and serious effort to address multicultural issues as well as issues of gender, class and race both in the curriculum and in the classroom discourse" teachers and children are raising different questions and identifying new dilemmas.

Given their commitment to helping each child grow, PDS participants described their need to know each student well. They have met this need in multiple ways. Some participants have created multi-age classrooms so that children and teachers can stay together for more time. Others, instead, are trying to meet this need by creating individual education plans for all students. Another PDS has turned to block scheduling to increase curricular integration and reduce learning "down time." At yet another site, ninth graders participate in daily counseling and guidance seminars focused on increasing student visibility and school retention. Participants in one PDS described their commitment to moving the individual child from the periphery to the center of the teacher's work: "All PDS and university staff who interact with our students [need] to enrich and expand upon each pupil's limited personal experiences as we ask them to integrate new learning." Some PDS teachers even claim "to know their students better than they ever had before."

As PDS participants work to help each child succeed, they have had to figure out new ways for students to develop the capacity to learn from, and work well with,

others. According to the survey data, in response to these twin goals, participants are working to create new classroom norms, new classroom tasks, and new agreements between themselves and others in the school and university community regarding the work of children.

Teachers' work

Not surprisingly, survey respondents seamlessly joined their discussions of how students learn to their descriptions of new roles for teachers. The teachers in "ambitious teaching" classrooms are intentionally working to change the teaching-learning process. They have moved from being knowledge transmitters to being knowledge facilitators. They have abandoned the text-as-curriculum model in favor of a process in which curriculum creation starts with the learner and builds on the knowledge that learners have. They use a broad approach to knowledge creation as they and their students access information from an array of sources, including computer databases. These teachers have come to see teaching as intellectual and transformative; they have come to see schools as places in which they too are learners.

Students in PDS classrooms receive "more adult help and nurturing because of the time that college students spend [with them]." Within PDS classrooms, participants report an expectation of shared responsibility for student learning. As one site described, "Interns co-teach with teachers; interns co-teach with other interns; interns, like their mentor teachers, work with small groups, large groups, and individuals." With more adults available to facilitate the teaching-learning process, teachers are designing additional hands-on and out-of-classroom learning activities. At one PDS, teachers "enable students to take hands-on activities to the higher level of 'minds-on' activities. [Consequently], the teacher's role is not to tell students what they should observe or learn or to leave students on their own to carry out procedures, but to encourage students to share their beliefs with their classmates in both small groups and with the entire class."

The impact of others on teachers' work

In part, teachers in PDS classrooms are changing what they do because of the work of others. The survey data indicated that more than 60 percent of the sites are making significant use of curriculum standards set by local, state, and national groups (see Chart 4 in the Appendix). For example, at one site the state's mandate for more authentic assessments spurred a committee of administrators and teachers to revise the school's assessment measures. At another site, teachers significantly changed reading instruction as a result of their conversations with teacher interns about new approaches, including the creation of "heterogeneous, genre-based reading groups." These examples suggest that as teachers began to change their learning goals for students, they increasingly found themselves *doing different work*. The teachers at another PDS described how the interns have changed their work in classrooms:

> As we began to work with the university students, we noticed that they wanted to do some different things with our kids! We noticed that our kids responded and were excited about the lessons that the student teachers and interns were presenting. The student teachers were presenting "invitations" to our students to write, to investigate, to ask more questions. We began to seek the same training our student

teachers were receiving. We became engaged in [creating] inquiry lessons designed through the guidance of the university faculty and practiced by both student teachers and teachers. We were linking theory, research, and practice.

Student assessment

At some sites, participants indicated that mandated assessment measures and traditional reporting mechanisms (i.e., report cards with letter and number grades) ignored or contradicted PDS learning practices. Several PDSs denounced standardized tests that measured "multiple choice" knowledge, and a majority of the site respondents identified statewide testing mandates as a barrier and, to some extent, a negative external standard. Most participants had not yet figured out how to move beyond them. In one site a respondent noted, "We are being held to the mat on standardized test scores. We must have assessments but our discussions about inquiry become quite heated when it comes to testing and assessment. I am not against standardized tests, but they should not drive the system."

Although standardized testing continues, more than 70 percent of the sites report using multiple approaches for student assessment. In some PDSs, teachers, teacher educators, and prospective teachers have begun to work together to examine students' work in light of what the students know and should be doing. As teachers "inquire" regularly about how students learn and how they should teach, they model for children the kinds of thinking and action required for inquiry-based learning. Some PDS participants gather broad and deep data on students' cognitive and affective progress by engaging in formal, individually focused "child studies" or "descriptive review" examinations. At one elementary school site, participants now assess student literacy through miscue analysis rather than base their assessment of student knowledge on standardized reading scores. In addition to ensuring more accurate student placement and instruction, the use of miscue analysis provides participating teacher education students with firsthand knowledge of an instructional and assessment model that specifically expands their teaching repertoires and conception of learning. As participants at one site concluded, "Teachers who are dissecting their teaching styles and focusing on how student learn work harder to recognize student needs and meet those needs."

Outcomes for students

PDS participants overwhelmingly reported that the work inside their classrooms has changed. Further, respondents repeatedly suggested or implied that students are benefiting from being part of a PDS classroom. Some indicated that test scores have gone up and that student suspensions have gone down. Some suggested that PDS classrooms look and feel different because students are more engaged with one another and with their tasks. As students are asked to demonstrate real knowledge through exhibitions and portfolio explanations, they become more responsible for their own learning. And, as teachers create assessments that measure students' learning in progress, they focus more directly on their goals for students and on the standards they have for student learning.

What questions do these findings raise?

The students are different across PDS sites. Some come from educationally advantaged families and bring with them early, positive school experiences. Others,

however, have had fewer opportunities to achieve school success. These differences are subtly, but consistently, described by PDS participants. Consequently, the PDS not only is new work, it is contextually dependent new work. How do we create standards that acknowledge and support different learning and teaching contexts?

What happens when students leave these classrooms and move on to non-PDS teachers and schools?

PDS Goal 2: Provide Teacher Education

Preservice teachers' roles and responsibilities

Like other preservice teachers, those in PDS sites enter their classrooms eager to help children learn. They, like their peers elsewhere, seek to instill in children their personal love of knowledge and learning. In the PDS, however, preservice teachers are learning to become teachers in very different ways. More significantly, according to the PDS data, they are learning to become different kinds of teachers.

Early and continuous field experiences

Sixty-five percent of PDS respondents indicated that their preservice teachers now spend more time at the school site, with most reporting changes in the number of hours or weeks in the field. In a small number of sites, preservice teaching time has changed dramatically, moving from a daily eight-week-long experience to a yearlong, full-time commitment. Some sites have even figured out ways to compensate preservice teachers for this additional time through tuition waivers and modest work stipends. By increasing their time in the school, preservice teachers have an opportunity to learn that "teaching is a developmental process; [it] starts simply and then becomes more complex."

New memberships for preservice teachers

Preservice teachers in the PDS are learning to think about teaching as a collaborative, public activity. They are usually assigned to a school as part of a cohort, and they are sometimes paired with a peer teacher in the classroom. Significantly, PDS participants in 24 of 28 sites indicated that preservice teachers become part of school-based teams. Although the teams are organized for different purposes, the work is generally focused on the teaching-learning process, including the development of curriculum, the design and implementation of action research, and the creation of performance assessment systems. By joining preservice teachers to an extended group of teacher mentors, the PDS sites appear to be rejecting the long-standing apprentice-like model of teacher education. Instead, the data suggest that PDS teachers have begun to take a kind of "collective responsibility" for beginning teachers. As PDS preservice teachers participate in classrooms throughout the school, they develop new alliances and new knowledge. Most important, they move away from a model that seemed to suggest that all good teaching looks the same.

New work for preservice teachers

More than three-quarters of the sites reported that preservice teachers are engaging in research about practice. One PDS has implemented a developmental approach for its student teachers: "Action research plays an important role at the school. The total staff and preservice students are involved in collaborative action research. Preservice teachers are included in the mentor teacher team research project during the first quarter, then conduct their own individual action research project the second and third quarters."

Student teachers at the PDS sites, like their peers in other places, add value to the classroom. In some instances they provide additional services to students, like those who become "writing buddies" to children who need more individual attention. At times their presence may serve to increase parental support and recognition for schools, as parents discover that their children in PDS classrooms are learning in more productive ways. At other times, their presence allows school-based teachers to engage in alternative professional work (see the next section on the professional development of teachers). The preservice teachers at PDS sites contribute much to the larger school community because they are engaged in the work of "real" school. Over time, they become more valuable to others and more valued by them. In the words of one PDS participant, "Student teachers are more like junior faculty rather than 'good guests.'"

Increasing the connections between theory and practice

Geographic distancing between the academy and the school has made it easy for school- and university-based participants to maintain their distinct worlds and to divide up the responsibilities associated with the education of preservice teachers. In response to these divisions, preservice teachers begin to see the process of "thinking about teaching" as a university-based activity, whereas the "act of being a teacher" takes place at the school. Thus, it is not surprising (given this early socialization) that teachers continue to separate theory from practice or thinking from doing.

The PDS attempts to reform preservice education by bringing together the worlds of the university and the school. More than 90 percent of the survey respondents indicated that they now locate one or more preservice courses at the school site. In some instances, the university-based teacher continues to facilitate the course work on site, whereas at other times and places a school-based colleague takes on this responsibility. Several PDS sites suggested that the ongoing, visible presence of university-based faculty at the school makes more real the connections between theory and practice.

Other systematic attempts to blur theory and practice in the PDS are suggested by the many new roles and responsibilities for university- and school-based teachers (see Chart 1 in the Appendix). These data come from the final section of the survey in which participants were asked to report on a discrete set of activities and practices. According to survey respondents, in more than half the sites, school-based teachers hold university appointments; in more than 80 percent of the sites, they collaboratively plan teacher education courses and experiences; and in about 60 percent of the sites, the school-based teachers participate in activities aimed at university renewal. The university-based teachers appear to be working differently as well, since more than half the sites reported that their university partners are teaching children on site at the school. Almost all the university partners are participating in school-based councils and committees aimed at school renewal. In all but three sites, school- and university-based teachers report that they are working together to plan professional development activities.

Although many participants seemed to suggest that "student teachers come to believe that teaching has a knowledge base," the sites reported differences in the ways that they use knowledge to influence and inform practice. In some sites, fieldwork often shapes what is done in the course work rather than the reverse. Others, however, seem to hold on to more traditional approaches; at these sites, "the students make practical applications of knowledge, learning principles, and teaching techniques

which have been developed or acquired in other courses to classroom situations." It is important to note that in either case, the knowledge of practicing teachers has gained new status and authority.

Outcomes for new teachers

Several sites indicated that PDS preservice teachers seem to enter teaching with more skills and knowledge than do their peers. Some sites wrote that their PDS graduates have a better understanding of diversity and the nonacademic needs of students. Others spoke about their PDS students as better communicators, as more professionally committed, and as more self-confident. Some concluded that their PDS graduates were better prepared for the work of becoming a teacher because they had developed "a change agent orientation." Finally, some believed that their new teachers would be more likely to reach out to others and to participate in schoolwide activities. However, since PDS respondents have not yet conducted systematic follow-up studies with their graduates, we need to be cautious about the outcomes they have identified for preservice teachers.

The limits of change

Selection and assessment

School- and university-based teachers report that they have begun to share responsibility for preservice teachers, including collaborating on their selection and assessment. These practices, however, are not always clearly described in the narratives of the survey responses, and so it is difficult to generalize about them. In a few sites, participants indicated that they have jointly developed preservice teacher admissions criteria. Some participants, however, believe that because the PDS is just one of many teacher education programs at the university, separate PDS criteria are unnecessary. Consequently they have not established any new criteria for working in a PDS, nor have they invited school-based teachers to participate in the selection process.

The approaches used for assessing preservice teachers also remain murky, since fewer than 40 percent of the sites report using local, state, or national standards for this work. One PDS site stood out from the others because it had created its own set of standards (called proficiencies) for student teachers. Another site suggested that the process for assessment is based on a coaching model through which "teachers and student teachers use a collaborative journal in which reflections, revisions, and celebrations are shared."

Too few school and university participants

When school- and university-based teachers commit to working with student teachers in the PDS, they are most often responding to personal, intrinsic motivations. From the survey data it appears as though some PDSs have not been able to attract a critical mass of school-based teachers. Others have not been able to recruit the "right" members from the faculty. Across the sites, organizational supports remain uneven. Worse yet, the cultures of the school and the university seem to argue against changing the preservice education of teachers: university-based teachers worry that their PDS efforts will be ignored or undervalued when tenure and promotion decisions are made, and school-based faculty have little time and hardly any compensation for doing PDS work.

What questions do these findings raise?

How can participants maintain their commitment to educating preservice teachers if organizational supports remain unavailable?

Some of the PDS sites focus on the pre-practicum experience and provide few opportunities for intern or student teaching placements. What happens to preservice students who are asked to move out of the PDS for the bulk of their clinical work?

And what about next year, when most PDS graduates find themselves teaching in schools that are unlike the PDS? Have we set them up for failure?

PDS Goal 3: Support Professional Development

Redefining teacher learning

Schools exist to support children's learning. As organizations, however, schools do little to support the growth and development of teachers. In contrast, PDS sites have sought to change the work of teaching so that it becomes the work of learning. According to the survey data, some PDS sites are re-creating teachers' work through simultaneous structural, normative, and cultural change. Most significant, PDS participants describe powerful examples of how they have reinvented the process of teacher learning. They have challenged extant professional development traditions that defined teacher learning as an activity that teachers did independently, on their own time, and away from their classrooms. Further, PDS participants are beginning to use their professional development work to move the practice of teaching from the private to the public domain.

Formal course-based learning opportunities

Most PDSs have created multiple teacher learning opportunities through course work. In some cases, school-based teachers work as university adjuncts, offering courses for preservice teachers either on site or at the university. In a very few cases, the PDS school-based faculty are teaching college-based faculty about technology and its uses in the classroom, with one participant remarking how "the college faculty have to scramble to keep up."

At other times, school-based teachers are the students, and university-based faculty or consultants are the teachers. Either in the role of teacher or student, survey respondents indicated that course work in the PDS provides school-based teachers with significant, structured venues for developing their skills and knowledge and for learning with others. One site described the process in this way:

> Inquiry is openly discussed and shared through "Learning Circles" which provide a formal and specific opportunity for teachers to learn from each other. Teachers are given an in-service credit for fifteen hours of participation in a Learning Circle, which suggests district support for inquiry sharing. The Learning Circles have a specified agenda and structure—reviews of literature and focused discussion, all resulting in inquiry projects related to building PDS specific goals.

Learning through interdependence

PDS survey respondents have begun to change their beliefs about the role of the "cooperating" teacher. They describe the relationships among school-based, university-based, and preservice teachers as collaborative, teamlike, and interdependent, rather than as cooperative, respectful, and formal. In contrast to the traditional model of one teacher to one student teacher, they speak about the many connections among the preservice teachers and other school-based faculty.

Repeatedly, and throughout the many survey sections, participants point to the multiple connections among adults in the PDS, irrespective of their formal roles and status; they speak about building collaborative work organizations *because they have discovered that collaboration is beneficial*. And, as PDS participants become used to working with others, they begin to devise additional ways of working together. At one PDS, participants have organized themselves into learning clusters. Each cluster is a group of individuals who share an interest and focus in a particular area. The clusters are ad hoc work groups that form in response to individual and organizational needs. To date, participants have worked in curriculum, professional development, action-research, higher-order thinking, diversity, technology, and student assessment clusters. The cluster structure allows members to grow as they work with others who share similar interests. Further, the structure supports a model for work distribution that respects each member's time and energy limits.

More learning through more time

About half the sites indicated that the intern presence allows teachers to engage in significant professional development opportunities during the school day. In several places, school- and university-based faculty participate together in this new work. At one PDS, a classroom teacher works with other teachers, university faculty, and the interns as a "learning coordinator"; she now has time to do this new work because the preservice teachers have taken over some of her responsibilities. At a nine-year-old PDS, the site has structured multiple out-of-the-classroom learning opportunities for school-based teachers, including a full day of professional development each week, a three-hour inquiry group meeting every three weeks, and a five-hour monthly meeting for teachers to discuss large issues of curriculum and pedagogy. At this site, participants have moved their commitment to teacher learning from rhetoric into action. The following excerpt illustrates the potential of this new learning structure:

> Having just spent three hours today at our PDS team's regular three-hour research meeting,...I've been thinking about the importance of inquiry—and also of the importance of time, commitment and collaboration of college and school faculty in this whole operation. These meetings could never have happened in our first year as a collaborative. But the seeds were there then. There was time. There was discussion. There was a shared vision and the determination that school and college faculty would enter the conversation at exactly the same level....This is the first year that this group has met formally to discuss their individual research.
>
> The meeting took place, as it always does, in the elementary school library. The meeting today was chaired, as it always is, by the same college faculty member. This professor's role is to move the meeting forward, interject new ideas and

theories. But it is the teachers who present their work at the meeting. It is their individual inquiries that are shared and hashed out by the others. This is a meeting of eight school faculty members and the interns' supervisor (who is also a full-time college professor). Three school faculty members present their research at each meeting--school and college faculty respond to the presentations. It is important to state how valuable these meetings are, and how they directly affect our teaching.

Outcomes for teachers

PDS teachers report feelings of confidence in their own knowledge. Although teaching continues to reflect non-routine and unpredictable activity, PDS teachers have learned how to work differently and better. They have changed their classroom practices in small and large ways. They have created structures and spaces for analysis and reflection with colleagues based at the school and at the university. Teachers report feeling "stimulated" by their involvement in the PDS and by the public recognition they receive. They have taken considerable responsibility for their learning by determining their own needs and designing their own development plans. Professional development is no longer course driven and credit constrained. In the PDS, teachers' growth appears to come from and through teachers' practice; learning takes place in the context of thinking and acting like a teacher.

The limits of professional development in the PDS

Teacher participants only

From the survey data, it appears as though school-based teachers are the only participants directly engaged in systematic professional learning activities. In only a very few places do participants speak about the ways in which PDS-based administrators are examining their practice. For the most part, administrators appear in the survey data only in the roles of gatekeeper and cheerleader.

The university-based teachers describe themselves as the facilitators of others' professional development. Although they participate with their school-based colleagues in PDS activities, the data do not suggest that they have entered into this relationship as learners. PDS work may not be constructed or conceived of as a professional development opportunity for college-based teachers. In reflecting on this anomaly, one PDS site seemed to be worrying aloud:

> Lack of knowledge is a barrier to simultaneous renewal. Most college of education faculty see themselves as having an expertise in a particular field: reading, adult education, applied statistics. Simultaneous renewal (or educational change) cuts across all of those boundaries, creating, in effect, an entirely *new* subject area. Efforts to have all of us read and discuss the same materials, e.g., various Goodlad books and articles, were largely unsuccessful. Like the gulf separating technology users and non-users, the gulf between those reading the literature of school change and simultaneous renewal and not reading is wide, and getting wider daily.

The few instances in which university-based teachers were also identified as learners are worth noting. According to the narrative writer,

> [b]oth institutions' concern for issues of equity, multi-culturalism and inclusion have combined to make student interns, college faculty, and schoolteachers much more aware of these issues. School and college faculty regularly address these issues and want to learn more abut them. The professional development day conducted by the teachers in November 1995 was dedicated to a discussion of racial equity. Teachers and college faculty read works by Lisa Delpitt and Gloria Ladson-Billings in preparation for that day, and the day's discussions dealt with issues of achievement for African-American children.

At another site, college faculty are beginning to join with classroom teachers in a research seminar in which college and school people have equal footing and all share their findings. According to PDS participants, "This is a clear departure from the traditional division between school and college faculty, and the division between theory and practice."

Old norms prevail

Many sites seemed to confront, and not easily cope with, systemic constraints related to teachers' learning. These included such issues as the local school board limiting teacher time away from the classroom, the job of teaching being defined not by reflective action but by adherence to curricular cookbook recipes, traditional approaches to teacher evaluation failing to recognize and reward teachers' new knowledge and skills, and support for continuing the unequal distribution of the most important or "right" knowledge. Only about half the sites are using local, state, or national professional development standards (see Chart 4 in the Appendix). At the school site, teacher equality norms also undercut the redesign of teachers' learning roles, since some non-PDS members continue to look at the work of a PDS teacher and ask, "Who does *she* think *she* is?"

What questions do these findings raise?

The majority of teachers today are mid-career professionals. They are facing life changes that can be as traumatic as those encountered in adolescence. At a time when many teachers have already figured out successful ways of doing things, the PDS initiative seems to ask them to reinvent themselves. Not all teachers want to engage in this task; some, however, change their minds as they watch their colleagues change their classrooms. How can PDSs respectfully encourage teacher development among those who are more and less "ready"? What steps can PDS participants take to avoid the re-creation of the one-size-fits-all professional development model?

Teachers need to engage with their peers and with others who can guide them through the process of change. They need opportunities for sharing successes and failures, including regular feedback about their progress from expert consultants and from others inside the school. They need to learn how to teach one another (peers) as they engage in their own learning. How do district and teachers' union rules and polices support the redesigns implicit in PDS work?

Participating teachers need strong and consistent messages of support regarding the value of this new work. They need to know that others—including peers, school administrators, and parents—recognize how hard they are working and how intensive their tasks are. They need forums to display their achievements and successes; similarly, they need safe spaces in which to try and fail. Although they need to be

buffered in their new work, they cannot hide from other teachers or members of the external community. How will the PDS provide the safety required by teachers in their development of new classroom practices?

How can the PDS help university-based teachers identify and meet their learning needs?

How can the PDS help school-based administrators identify and meet their learning needs?

PDS Goal 4: Inquiry[2]

This section on inquiry differs from the other sections because it was developed from a two-stage data collection process. After an initial systematic review of the surveys, we discovered that respondents had had some difficulty in describing their inquiry efforts. In terms of the written narrative responses, only a few sites seemed able to delve deeply into inquiry in any significant way. We decided to conduct follow-up telephone interviews with about half the PDS respondents in order to deepen our understanding of the survey data. We learned more by talking to participants, especially in terms of important differences related to the depth and breadth of each site's inquiry practices.

Inquiry in teaching and learning

By far, "inquiry in" teaching and learning was most evident and easily described. School– and university–based participants who engage in this type of inquiry collaboratively define and investigate matters of import for the student, the school, and the profession. For example, "inquiry in" teaching and learning can be represented by teachers sitting around a conference table, debating the merits of student work in one of their regularly scheduled portfolio review sessions and how they must change their practices to enhance the student's performance. "Inquiry in" teaching and learning can also be as complex as a sophisticated action research project that draws on multiple methods and far-reaching dissemination strategies. The focus is (or must be) on student learning.

"Inquiry in" teaching and learning seems to be rooted in the view that *all* participants—students, preservice and experienced teachers, and teacher educators—are members of a learning community. This community raises specific questions, seeks to answer them systematically, uses its findings to inform practice, and relates its findings in a more formal way to those of others who may have similar questions, concerns, or both.

The sites provided examples of action research projects, case studies, collaborative teaching, curriculum redesign, and authentic forms of student assessment; all of these were conducted in some part by teachers, teacher educators, and prospective teachers. As one site reported, "inquiry in" teaching and learning is used "to guide practice, just as practice may guide what we decide to inquire about."

To transform practice through "inquiry in" teaching and learning, one site has investigated questions like these: What role does available technology play in our teaching and curricular designs? Why are our students doing so poorly in formal test settings where their writing skills are evaluated? What do we need to do to help our students become better writers? How has being a part of a collaborative program changed teachers' professional careers? How can our PDS staff be of service to

tenured teachers in the district who have been evaluated as needing mentoring or assistance? In this PDS, participants have collected data in the form of artifacts, student and staff surveys, journals and anecdotal records, interviews, and observations of classroom and other contexts.

PDS teachers inquire about student needs through various formal, informal, and authentic assessment techniques—portfolios, individual conferences, observations, and interviews. With more time and organizational support, some sites have been able to translate the results of their inquiry into case studies, videotapes, and presentations at state and national conferences. This type of inquiry can create a number of opportunities and possibilities. As described by one PDS

> The inquiry team [here] evolved as teacher education students, professors, and school faculty began to have questions about whole language and skills. A small group began their inquiry in teaching and learning with a lunch meeting, then a trip to New Orleans to the National Reading Conference. There were five teachers, a student teacher, and a university faculty member. This group of five teachers and university people continues to work, meeting weekly. Their work has never been university–imposed.

Inquiry as teaching and learning

"Teaching for understanding" are words used for inquiry-based teaching whereby teachers draw on multiple forms of pedagogy to engage all students in understanding, using, and creating knowledge in real-world contexts. This type of teaching requires highly skilled practitioners to "inquire" regularly; according to those who advocate teaching for understanding, teachers can fulfill this goal only by constantly questioning what they do and how every student learns. Similarly, students are also expected to question what is learned and why. (Another way for readers to think about this inquiry goal is to return to the data on student learning presented in the first section of this report.)

To a certain degree, respondents provided abundant rhetorical, but not necessarily substantive, proxies for the concept of teaching for understanding (e.g., whole language, child-centered curriculum, use of manipulatives). Those sites that were able to describe more powerful examples of "inquiry as" were those that could articulate how their inquiry processes enabled them to confront participants' incompatible beliefs and actions.

In one site, "inquiry as" teaching and learning began with the idea that the PDS site would provide models of teaching in a clinical setting. This initial view has evolved into the conception of *classroom teachers* as "teacher researchers," with teachers maintaining journals and anecdotal records regarding the reactions of individual pupils or groups to varying instructional strategies. In this same site, the inquiry mindset and actions are extended by case studies and other research "to validate and substantiate best instructional practices." In the sites with seemingly more developed conceptions of inquiry, much evidence suggests that teaching and learning are "clearly informed by a knowledge base."

Inquiry on teaching and learning

"Inquiry on" refers to the assessment of the PDS as a reform initiative, especially as participants' efforts relate to enhanced student learning, the relationship between the learning of adults and children, or both.

"Inquiry on" the effects of the PDS was the least described dimension, with fewer than a handful of the 28 site respondents describing specific research that informs both practice and policy in a significant and sustained manner. A number of sites clearly recognized the need for this much neglected form of inquiry. However, even when "inquiry on" teaching and learning was underway, it was difficult to ascertain how the sites were reporting and using the data.

The sites offered little evidence of how they were moving their inquiry findings from the particular to the general (a clear goal for those who advocate conducting inquiry on PDSs). For example, one PDS site indeed has looked at its own practices and presented its analysis in a recently published paper. The site was careful to note, however, that the primary goal of the "inquiry on" its PDS was to enable it to better understand the "whys and wherefores" of the school, which may not be generalizable to other PDS sites. Given the design of the site's inquiry, this limitation is quite understandable and appropriate.

Inquiry outcomes

The respondents did not reveal how they used their new data to assess the overall effects of the PDS effort and inform future policy. Yet, in some sites, successful outcomes were claimed; they noted considerable achievements related to increases in standardized test scores, students' self-esteem, ratings for teacher education graduates, and parental participation, and decreases in violence.

More often than not, the inquiry process itself has helped PDS educators confront and cope with their differing views in productive and positive ways. For example, one site wrote about a "growing belief that teachers are lifelong learners and that teaching is not telling," yet other site members "still hang on to old beliefs about teachers and learners." Such sites seem better able to manage the inherent conflict associated with change through inquiry itself. Inquiry can provide a safe context for looking and debating as well as for thinking and acting differently. It appeared that those sites that embraced inquiry more consistently and cogently were more likely not to be blocked by alternative views of teaching and learning.

Survey data suggested that such supports as small mini-grants and stipends, peer visitation, teachers' working with the same students for two or three years at a time, and real mentoring time for teacher education students could build an important foundation for PDS inquiry initiatives. New roles for school-based faculty as part-time facilitators of inquiry—with one foot in the classroom and another in the world of brokering new ideas and actions among adults—were important to moving forward the PDS's inquiry agenda.

The limits of inquiry

The sites reported a litany of constraints related to inquiry. These limitations revolved around the more typical issues of insufficient rewards and time as well as of bureaucracy and budget. Indeed, few sites had significant dollars supporting their efforts.

Even when participants reported their use of inquiry-based information to inform instruction, it was sometimes difficult to see and understand the effects of this use in the data provided by the PDS sites. "Inquiry in" is viewed as a strategy to improve the practice of teaching. However, in the narrative data, respondents did not always describe their methodologies clearly; in most cases, they limited themselves to describing the research products or the perceptions of different consumers (P-12 students, teacher education graduates) and stakeholders (parents, administrators). The connections between inquiry in student learning and inquiry in adult learning are even less apparent. In only a few sites were participants able to describe how inquiry in teaching and learning was shaping and being shaped by professional development.

Finally, in another seemingly well developed site, inquiry appears to be going on, but the survey respondents lamented that "formal action research does not occur often." In this site, training for action research does not exist, the school district does not evaluate programs in ways consistent with the PDS, and formal research in schools is just not highly valued by many participants and stakeholders.

Parity problems

In many sites, parity problems between the school and the university create powerful obstacles to inquiry in teaching and learning. One manifestation of this problem is that PDS inquiries are always about the P-12 school, not about the university. This imbalance largely mirrors existing hierarchical relationships between the university and the school. According to survey data, as many school-based faculty continue to look to the university as the primary source of information and inquiry expertise, participants further reinforce traditional relationships between P-12 and postsecondary educators. In the words of one site respondent, "It is sometimes difficult to overcome preconceived ideas about the university as the experts and the schools as being below the university." Consequently, it is not surprising that school practices, not university ones, become the target of inquiry.

One PDS described in some detail its early difficulties in establishing a PDS-inquiry agenda:

> Eight teachers were to work on action research projects in their PDS. These teachers chose their own topic and a university colleague guided them through the process. They met individually with their instructor (university colleague) and as a group. All went well until the time came for the teachers to write up their findings. All of the teachers passively resisted. The teachers complained that they were not given enough direction and griped that although they were told that the PDS venture would be a cooperative one, the university faculty member created a hierarchical relationship which resembled a teacher-student relationship. Meanwhile, the faculty member complained that after she volunteered her time, the teachers were not acting professional and were just trying to get out of doing the work. She was very disappointed.
>
> Thus, miscommunications abounded. Teachers alleged that they were expected to demonstrate principles that they did not understand—engaging in inquiry, reflective journaling, moving from practice to theory, etc. After numerous meetings, the university faculty member and the teachers reached a compromise. Eventually all

> the teachers did turn in their projects, but several admitted the "insecurity" they possessed. Some were concerned that their work "was not very good," or that they were "a really bad writer." They feared having their work judged. The university co-worker's opinion was important to them, and they were afraid she would think less of them as professionals.

Another site worried about the ways in which available data were being used: "All of the 'changes' at the PDS site have been promoted through the media and have served to promote a positive impression of the school." In a sense, this site has gone public, but teachers and administrators worry that they still do not have the data they need and fear that positive publicity may contribute to a "halo effect." Participants wondered whether "[t]he Hawthorne effect may occur—with the attention given to the site contributing more to the underlying cause of change, and not necessarily the kinds of inquiry and reflection about teaching and learning that are occurring."

What questions do these findings raise?

How will PDS inquiries be used to change practice at the school and at the university?

How will participants establish inquiry as a norm when external accountability mandates contradict and undercut their work?

Findings and Analysis: Part II

The NCATE survey asked participants to identify their PDS goals and to describe the ways in which they were working to meet them. The first part of this report presents the goal findings and raises some related questions. In this next section, three additional themes that have emerged from the data are discussed. They focus on (1) the PDS as a cross-institutional initiative, (2) the resource commitments and exchanges made by participants, and (3) the structures that participants have created for governing their work. Although some of these findings have been referred to indirectly in the section on PDS goals, this additional analysis merits a separate discussion.

Participants in Cross-Institutional Work

> In a partnership between learning institutions, the major capital is knowledge. Those perceived to have the most knowledge are the most powerful and those perceived to have less knowledge defer to others....Our partnership has worked hard toward promoting the concept that practice has a knowledge base and that those who hold it have equal say in the partnership. We have also worked toward making this private practice knowledge more public through our collaborative inquiry projects.

These words, excerpted from a PDS narrative, suggest that PDS school- and university-based teachers and teacher education students have begun to reconfigure their relationships on the basis of new beliefs about successful cross-institutional work. Table 1 offers a snapshot of how PDS participants are facing the challenges related to designing their practices to meet the needs of a new organizational type.

PDS participants wrote eloquently about the ways in which they have learned to work together. But they also noted some unresolved issues that demand attention. Many of these issues coincide with dilemmas encountered by others who have committed themselves to cross-institutional work. For school and university participants, however, the alliance-building process is further complicated by long histories of unequal status.

Table 1. ***New practices in a collaborative work organization***

University- and school-based faculty learn in multiple contexts.
- School-based faculty hold university teaching appointments.
- University-based faculty teach school students.

University- and school-based faculty decide together.
- They collaboratively plan preservice teacher education curriculum.
- They collaboratively plan professional development activities.
- They share supervision of preservice teachers.
- PDS members participate in school change decision making.
- PDS members participate in university change decision making.

University- and school-based leaders engage in PDS work.
- They participate on PDS councils.
- They set policies to support the needs and activities of PDS participants.
- They hire school- and university-based teachers who share PDS beliefs.
- They allocate resources to support PDS initiatives.
- They reward PDS participants.

Power, authority, and control

"It is sometimes difficult for teachers to disagree with university personnel or with administrators," wrote one participant. Another pointed out that "decisions affecting university coursework are not yet shared." A third noted, "We are not necessarily equal but collaborative and changing; [we are] using the respective strengths of each." Another confided, "We have not openly addressed issues of power and influence." And last, at one PDS, participants described how some dissatisfied university faculty had "walked away from their shared commitment to a jointly created curriculum." Although the university found another placement for student teachers, the PDS teachers were left at the site when things fell apart.

Compensation inequalities

In most sites, school-based teachers receive stipends for their PDS work, whereas university-based participants' work is part of their course load. This difference raises several important questions: How does this inequality limit the potential of the PDS as a school reform initiative? How many more tasks can teachers add to their day? How can teachers inquire about their practice if they have no time to think about it? What happens when people are not in control of their time?

Preparing for the task

In some narratives, participants described how PDS school-based teachers prepare for their new clinical roles through formal mentoring courses. There was no discussion, however, of the ways in which university-based teachers get ready for their new responsibilities. Further, although some mentioned the use of formal criteria for selecting school-based participants, at no sites were the university partners selected on the basis of their "fit" with the PDS mission and goals. Different recruitment and selection practices seem to reinforce perceptions of inequality and limit the trust needed for inter-institutional work.

Knowledge as a commodity held by others

Throughout the data the issue of whose knowledge counts emerged repeatedly. It appears as though many PDS partners continue to describe teachers as knowledge recipients rather than as knowledge creators. Accordingly, school-based partners report that they "tap the expertise of [other] professionals," rather than see this expertise within themselves. Another site asserted that the "university faculty members' observations and research keep the PDS program on track." In yet a final illustration, one PDS articulated its belief that the "university does research and the teachers use research."

Philosophical differences

PDS participants often come to their shared work with different beliefs about what is right. Clearly, they come with different experiences that seem to foster different definitions of good teaching. For example, when describing their inquiry work, one site explained that "teachers think about inquiry as focused group learning which is problem-oriented [whereas] college faculty place more emphasis on seeking and applying findings from research." For some, "[t]here is a perception among school faculty that the university is not grounded in reality." Others hold the belief that "university-based teachers do not respect practitioners."

Finally, in none of the narratives did participants describe how the PDS clinical component fit with the philosophy, curriculum, and approaches to learning in the rest of the teacher education course work and the preservice teachers' larger university program.

Who participates in the PDS?

PDS work appears to depend on a critical mass of participants. Although respondents were unable to describe an exact head count, they were adamant that this work could not be done by a few brave souls. In newer sites, participants worried about how they would recruit more colleagues. In older sites, participants worried about how they would retain more veteran PDS members when incentives and supports remained inadequate.

For some, the worry about participation centered on bringing a more diverse teaching corps to the school, especially because the majority of preservice teachers continued to be Anglo, female, and middle class. One site lamented, "Our diversity is confounded by geography." Another explained, "Some interns need to relocate since the PDS is 90 miles from the university; [but] many nontraditional students can't afford to do so." Others pointed to the ways in which the university's "prohibitive" tuition limited participation by nontraditional students.

Resource Commitments and Exchanges—Supports and Constraints

Participants in cross-institutional relationships commit to collaborative work because they expect to gain individual and organizational benefits. They soon discover, however, that they need significant resources to accomplish their goals. Sometimes these resources are made available by the partner organizations; at other times, the partners need to go beyond their organizations to get what they need.

The PDS respondents described the resources that contributed to their successes as well as the constraints and disincentives that made their work much harder. I have organized these data into three categories—financial, structures and policies, and human resource—using two separate tables (2 and 3). Since some of these data could easily be part of more than one category, readers are encouraged to think of the boundaries on this display as permeable.

Governance Structures

Almost all respondents have signed formal (and sometimes complicated) contractual agreements for PDS work. According to the demographic data, the sites have set up councils for shared PDS decision making. Although parents and community members participate in some PDS councils, school- and university-based teachers and administrators predominate. At many sites, a formal PDS liaison assumes significant coordinating responsibilities. When universities engage in a PDS relationship with more than one school, they generally establish a multisite coordinating council to link all their partners.

Table 2. ***Supports***

Financial

External agencies provide grant funds.
States establish funding streams for partnership activities.
Schools and universities reallocate operating funds for PDS work.
Teachers receive stipends for professional development work.
The district locates all professional development funds at the PDS.
The university sets aside mini-grants for action research.
PDS participants receive course fee waivers or tuition reductions.
A district-sponsored bonus pay plan rewards PDS achievements with students.

Structures and policies

The district provides professional development time for PDS participants.
The university supports "on-load" faculty work at the PDS.
The district grants waiver policies.
The university offers credit "pools" to PDS participants.
Accrediting bodies acknowledge and support PDS work.
PDS participants have common planning time.
Membership in other reform networks expands PDS work.
The PDS site-based facilitator has time and clear responsibilities.
Tenure and promotion decisions support PDS work.
The teachers' union waives constrictive workplace policies.

Human resource

School- and university-based administrators work in the PDS.
Participants communicate through electronic etworks.
Key friends offer advice and support.
School- and university-based teachers ha e expanded/intersecting roles.
Frequent communication occurs among participants.
A critical mass of educators participates.

Table 3. ***Constraints***

Financial

New school or university dollars for PDS work are rare.
Sites are unable to trace the source of funds for PDS work.
Sites do not calculate the benefits related to PDS costs.
Stipends for PDS work are unevenly distributed.
University administrators hold purse strings.

Structures and policies

Tenure and promotion criteria devalue PDS work.
School-based PDS participants have no time for PDS work.
The principal appoints cooperating teachers.
Administrators decide professional development topics.
District hiring practices ignore PDS goals.
Student assessment mandates contradict PDS practices.
Mandated teacher performance reviews contradict PDS goals.
Teachers' union policies supersede PDS human resource needs.

Human resource

Too many change initiatives are being implemented at once.
School- and university-based teachers have conflicting affiliations.
District leadership is non-supportive or transient.
Leaders at the school and the university are under-informed and under-included.
The PDS lacks a critical mass of participants.
Public practice limits individual freedom.

The PDS narrative data suggest that cross-institutional work requires the creation of dense social relationships among participants. According to participants, the multiple, personal connections needed for PDS work seem more important, but less in evidence, than the formal governing structures. Further, the narrative data imply that the governing councils are concerned with decision-making, but participants have not reported the range or kinds of decisions entrusted to each council. And finally, we know little about the quality of the decisions made by the councils or the ways in which these decisions have affected PDS practice.

The data leave unanswered several important questions about the role of the governing body in a cross-site initiative. I'd like to conclude by asking several

questions: How do councils build bridges between partners? How do they facilitate simultaneous organizational renewal? What decisions are better left within the domain of each partner?

Implications

Change at the Individual Level: "The institutions do not work together; people do."

The PDS narratives highlight important ways in which participating teachers, preservice teachers, and students have changed their work. As suggested in the data, children in PDS classrooms work hard. Coached by their teachers, they assume significant responsibility for their own academic growth and for the growth of their peers. According to survey respondents, in these classrooms school life looks more like real life where workers collaboratively complete tasks, share knowledge, rely on one another for advice, and create meaningful products. For these students, time in school is no longer a kind of preparation for life; it is, instead, a compelling, engaging, and educative experience.

Teachers in PDS classrooms are also reinventing their roles. Along with their students, they are examining some long-standing assumptions and beliefs about the ways in which knowledge is created and learning takes place. Teachers are spending more time with adults, learning more about their own work as they explain and reflect on it with others. As one site concluded, "Change is easier when you're part of a team."

The university-based teachers are spending more time in schools with preservice teachers and children. With school-based colleagues, they are redesigning preservice teachers' courses and restructuring the work of student teachers at the school site. Most important, they are designing these courses with a clear focus on the context of the PDS site.

The preservice teachers at the PDS have joined new teaching and learning communities devoted to the reform of practice. They stay longer on site, work as members of teams, and engage in formal inquiries about what works for children. Like their colleagues, they are building strong beliefs about how teaching is a thinking, collaborative, inquiring act.

Inquiry and Change Are Inseparable[3]

We know that in these survey sites, a great deal of activity can surround action research and other forms of school-based inquiry. Although the PDS literature suggests considerable ambiguity about the role, type, and effects of inquiry as a PDS activity, the NCATE survey has begun to specify some of the necessary features and the ways in which they play out in practice.

These PDS sites are still struggling to meet their inquiry goals. Although respondents recognize the importance of inquiry driving practice—across all three dimensions—they report few examples of well-defined inquiry practices. Much of what is happening remains relatively uncodified. The good news is that these school-university partnerships realize how important inquiry really is to their long-term survival.

Very few sites could describe in detail how they engage in *inquiry on* their PDS work. Perhaps, this should not be surprising, given the relative newness of 80 percent

of the sites (see Chart 5 in the Appendix) and the more substantial commitment required from both participants and stakeholders to engage in tough questioning of their efforts. These sites—like many schools and universities across America—appear to be struggling with what Lieberman (1995) calls a culture of review, or what some call "going public." Yet, the data suggest that as the sites develop, they seem to come to understand the importance of the review process. A number in the survey have reported the unfolding of formal evaluation plans beginning in the spring of 1996.

Inquiry Is More Than the Right Stuff

Both the literature and the NCATE survey suggested some problems and cautions regarding the trappings of reform. For example, the survey respondents can speak to reflective practice and inquiry-based teaching and learning. The PDS can have a focus on external curriculum standards for students and teachers alike. Indeed, there were some examples of how curriculum (e.g., NCTM), school reform (e.g., Coalition of Essential Schools), or teacher education (INTASC) standards were used to promote a different way of thinking about, and acting on, program quality and inquiry. Professional development initiatives can include participation in workshops, conferences, courses, committees, and shared teaching as well as teacher-research courses taught collaboratively by school- and university-based teachers. Specific efforts can be directed toward Holmes Group principles, and the site can use a governance council to develop collaboratively a school renewal plan. These were all important supports, but the site may appear to have "all the right stuff" and still run into difficulties.

In several cases, we found that important structural arrangements, like a site-based governance committee, can focus primarily on the easy decisions (e.g., agenda, committee assignments, workshops, and due dates) and not on the hard ones. Consequently, college courses, cooperating teachers' roles, and student teachers' expectations remain the same more than not. In these instances, despite talk of teacher research and mini-grants, inquiry does not seem to surface in a substantive way and it is pretty clear that inquiry is not transforming practice. New organizational structures are necessary, but not necessarily sufficient. They are necessary, however, if PDSs are to become a sustained and powerful reality.

A Final Note

The worlds of PDS participants are complex, constrained, and filled with the urgent and pressing needs of vulnerable children. The data suggest that as a new organizational form, the PDS has the power to increase teachers' commitment to student learning by increasing teachers' knowledge about good practice. We may be asking too much, however, when we expect the PDS to take responsibility for the simultaneous reform of school and university partners. It may even be unwise to ask each PDS to work toward meeting all four goals during its early years.

Notes

[1] Isti Sanga at the University of South Carolina completed the demographic analyses.

[2] The inquiry discussion draws heavily from a separate document prepared by Barnett Berry, Kitty Boles, Kellah Edens, Annalee Nissenholtz, and Roberta Trachtman (In Press). The full version of that paper was supported in part by the National Center for Restructuring Education, Schools, and Teaching (NCREST) and by NCATE.

[3] Ibid.

References

Berry, B, Boles, K., Edens, K. Nissenholtz, A., & Trachtman, R. (In Press). *Inquiry and professional development schools*. NY: NCREST

Johnson, S. M. (1990). *Teachers at work*. NY: Basic Books, Inc.

Lieberman, A. (1995, April). Practices that support teacher development: Transforming conceptions of professional learning. *Phi Delta Kappan, 76* (8), 591-596.

Lightfoot, S. L. (1983). *The good high school*. NY: Basic Books, Inc.

Miles, M. B., & Huberman, A.M. (1984). *Qualitative data analysis: an expanded source book*. (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.

Appendix: Demographic data for NCATE's PDS study

Chart 1: Blurred Boundaries

Number of sites in which school- and university-based teachers are "blurring roles"

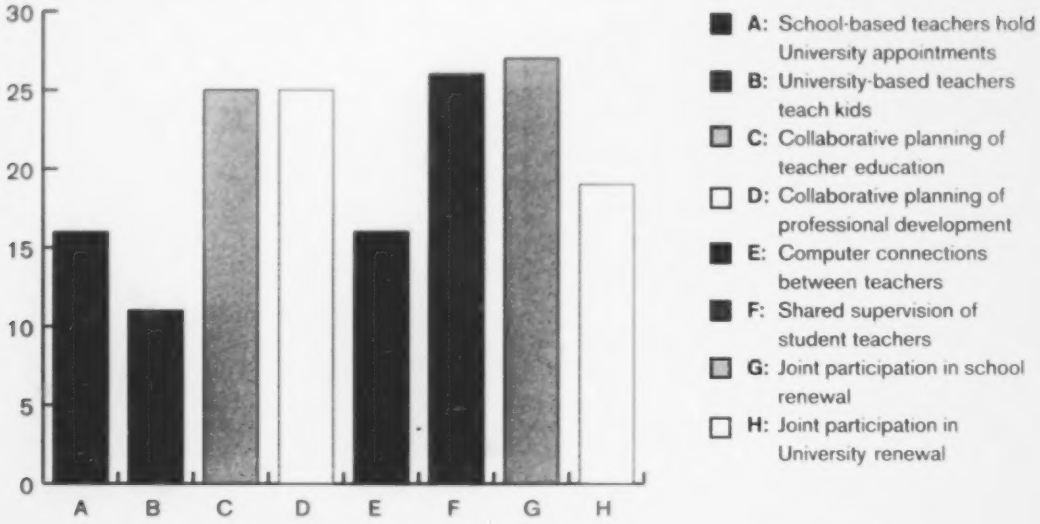


Chart 2: Use of Local, State, and National Standards

Percentage of sites using each type of standard

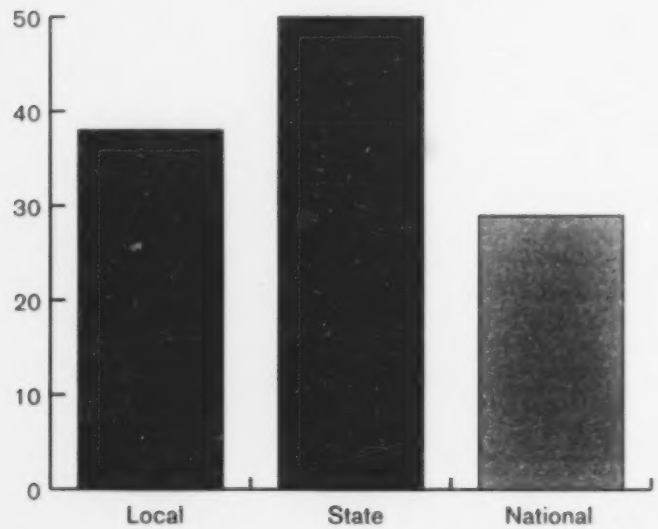


Chart 3: Student Teachers Engage in Non-Tradtional Practices

Number of sites

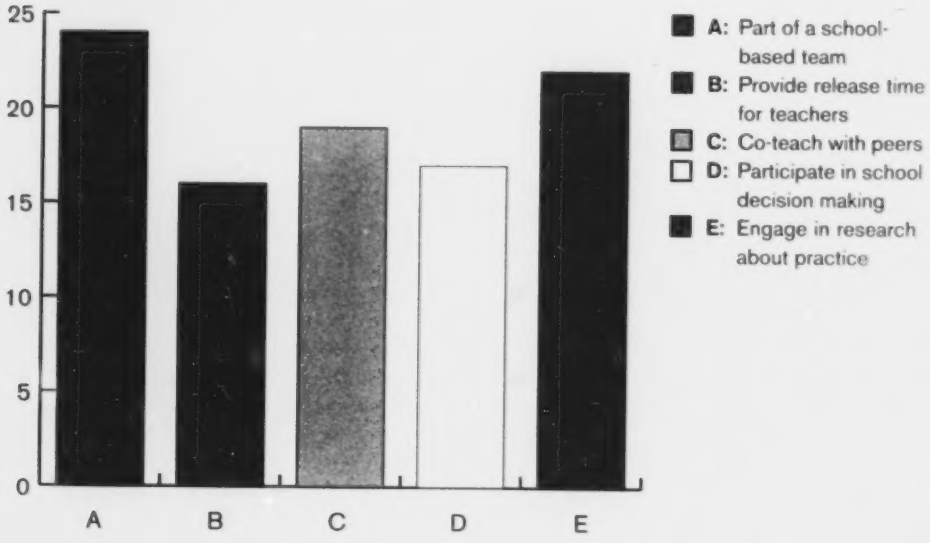


Chart 4: Standards in Use

Percentage of sites using each type of standard

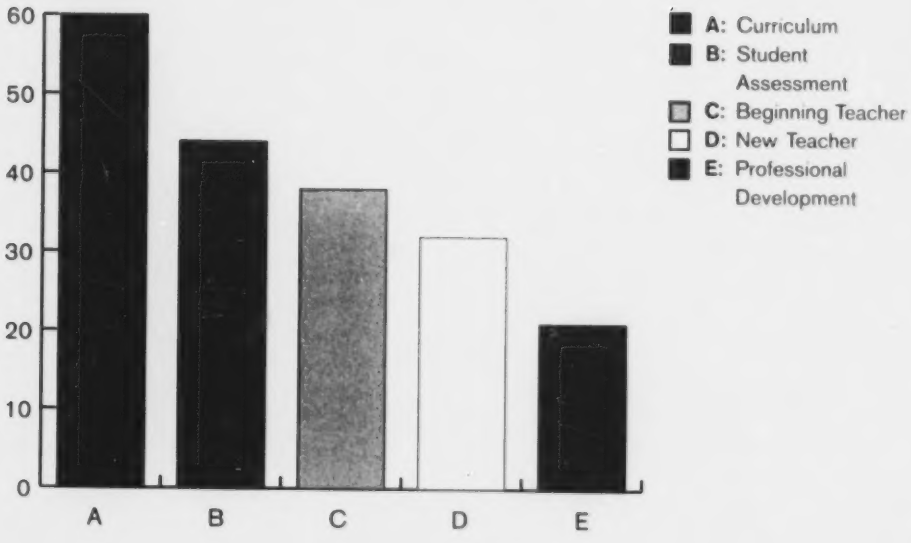
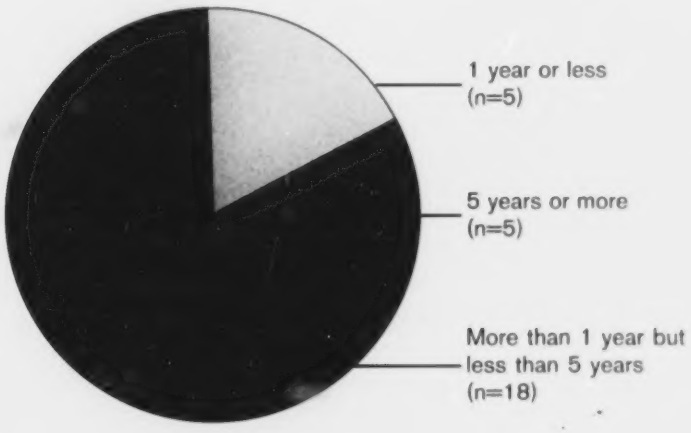


Chart 5: Years Engaged in PDS Work

Number of Sites



From Here

A Synthesis of the Chicago Discussions on PDS Standards

Donald Freeman

The Professional Development Schools (PDSs) Working Conference, jointly sponsored by the National Council for Accreditation of Teacher Education (NCATE) PDS Standards Project and the National Center for Restructuring Education, Schools, and Teaching (NCREST) PDS Network, was held on February 19 and 20, 1996, in Chicago. The 98 participants at the Chicago meeting were drawn from two groups. Each of the 31 PDS sites that had participated in the PDS survey was invited to send two discussants, one representing the school and the other representing the university side of the PDS. There were 38 participants from the NCREST PDS Network.[1]

The working conference had two aims:

- to review and comment on preliminary analyses of data assembled from a national survey on PDS practices, prepared by Roberta Trachtman, and four related working papers commissioned by NCREST; and
- to ascertain, from participants' perspectives, how the data and papers might inform the development of standards for PDS work nationally.

The Context of the Working Conference Discussion

The Chicago working conference was convened at a time of widespread and increasing interest in PDS work nationally[2] for its potential to support school reform and renewal, improve the possibilities for student learning, enhance professional development for teachers, and deepen the relationships between universities and schools in their common pursuit of teacher education.[3] The working conference was designed as the second phase of a process to collect data on the principles and practices that undergird current PDS work. The first phase involved a national survey of PDSs in which 28 out of 41 selected sites completed detailed self-studies.[4] Each participant in the working conference received the "NCATE PDS Standards Project: Preliminary Survey Findings," prepared by the principal investigator, Dr. Roberta Trachtman, as well as copies of the four working papers prepared for the standards project.[5] They had been asked to read, and come prepared to discuss, these documents. The intent of asking PDS participants to address the survey results in person in this way was to create a conversation based on the survey data and the participants' experiences in PDS work and thus to examine, validate, and further extend the database of PDS practices and beliefs that can inform the standards-setting process.

Structure and Process of the Working Conference

The day-long working conference was organized around four themes: student learning, professional development, teacher education, and inquiry. At the outset,

participants were asked to group themselves around one of the four themes as the focus of their discussions. Each theme group was asked to address two questions:

- How do the data reported from the survey, and the assumptions outlined in the analysis, square with your experiences in PDS work?
- What do these discussions suggest about the role and possibilities for standards in PDS work?

Discussions were conducted in breakout sessions; each group had a facilitator and a recorder. Groups did not hear directly from one another during the meeting, although there was a brief plenary question-and-answer period at the close of the conference.

The Synthesis: Approach and Method

Approach

I was asked to prepare a synthesis of the working conference. It is important to state from the outset that this synthesis is not a summary and that this paper is not intended to be a record of the Chicago meeting. Such a record exists in the recorders' notes now held at the NCATE office. Nor is this synthesis meant to be a grounded analysis in strictly qualitative terms, since the data are too disparate and intermittent[6] to permit that to be a productive approach in my view. This synthesis draws from three intertwined sources: the discussions held in Chicago, the synopsis of the survey data on which those discussions were based, and the working papers prepared in advance of the working conference. In preparing this synthesis, I have depended on the notes from the theme-group recorders, the groups' public notes (on poster paper), and my own intermittent observations of the four groups, as well as on the survey findings and the working papers. Additionally, my own work in a five-year-old PDS, the Windham Partnership for Teacher Education, has served as an important point of reference as I thought through the material.

I studied the material carefully; thought closely about it; and then tried to identify issues, conflicts, and consensus that I saw therein. My aim—to borrow a linguistic metaphor—has been to label the deep structures of tensions and commonalties that underlie the surface-level utterances in that material. In so doing, I have often charted a sort of trajectory of key issues, on the basis of logic and my own experience, to see where they converge. I call these deep structures "common threads." I have thus created a conceptual organization that may well go beyond the specifics of what was specifically said or written. However, I believe the synthesis to be accurate and faithful to the deep structure of the PDS landscape. There is always the danger, however, that reader-participants from the working conference may say, to borrow from T. S. Eliot's J. Alfred Prufrock, "That is not what I meant at all…That is not it at all." So, although I earnestly hope that this synthesis will prove to be a useful rendering of the conceptual issues and landscape that emerged through the materials at the Chicago working conference, I recognize that there will be errors and differing interpretations, for which I accept responsibility.

Method

This synthesis is meant to capture the cross-cutting issues and concerns that surfaced in the four theme groups in Chicago. To achieve this end, I began by reviewing and analyzing the proceedings of each theme group in conjunction with my own notes and the relevant working papers. From this work, I developed a synthesis that highlighted the main issues and tensions in each theme group's discussion. However, the conference organizers were clear that the four themes—student learning, professional development, teacher education, and inquiry—were intended as an operational structure to facilitate the discussions. These themes were not meant to define PDS activities categorically. Therefore, to avoid reifying in analysis the way in which the discussions were organized, this synthesis takes the next step to identify the common threads that cut across the discussions and concerns of the four themes.

The synthesis is organized into four common threads from the Chicago material: (1) roles and relationships; (2) time, results, and rewards; (3) evolution, acknowledgment, and gate-keeping; and (4) core values and processes. Following the development and discussion of each thread, I have elaborated the issues for standards-setting that flow from that thread. These issues are intended to capture the central concerns in the thread and to pose them in ways that can be useful to the next steps of the standards-setting process.

Language and Nomenclature

Language emerged as an important subtext in the discussions. Throughout the conference, people referred to themselves, their roles, and their work in various ways. Lengthy descriptions of role were common, for example, "school-based pre-practicum teachers" or "university-based teaching administrators," and differing meanings or uses for the same terms often surfaced. Language and terminology are hardly benign. Indeed, as in any emerging community, the differences and conflicts in nomenclature reflect underlying unresolved questions about the relative status and self-interest of those involved in PDS work as well as the basic challenge of trying to name new practices by using old terms. As one discussant said, "Language and naming so much inform thinking that the conceptual framework of PDS work eludes many people when we are confined to using old language to define new roles and responsibilities."

The question of language and nomenclature was also seen by one group as a metaphor for power in the wider issue of standards setting. In one working paper, "PDS Standards Discussion," the Santa Barbara PDS group asserted the "value of maintaining separate languages." They reported the following:

> Initially we felt we were all saying the same thing using different language. As we spoke and probed deeper, however, it became clear that the language differences between us were significant. We decided that we were not actually "saying the same thing in different language" but rather that the different languages we used allowed us to accept complementary concepts. (pp. 7-8)

The group concluded that "multiple languages...enrich our work, our understanding of that work, and our lives" (p. 8). However, the authors of the working

paper observed the inherent problem in this view: "One of the functions of standards is to provide a common language in order to enhance the construction of shared meaning" (p. 31).

In this synthesis, I am not in a position—nor is it my role—to sort out the terms used in the various groups. I will use four basic designations in the sections that follow: *students* are learners in the P-12 school system, *teachers* spend most of their time with students in schools, *trainees* are learning to teach in PDS settings, and *university personnel* have their roles defined by tertiary institutions. I am well aware, however, that the lack of clear and consistent terms for who does what reflects the important transitional nature of roles in PDS work. The pluralism of terms, and the issue of their standardization, is a developmental marker of the PDS movement and an important window into the conceptual terrain of those who work there.

Common Threads

Common Thread 1: Roles and Relationships

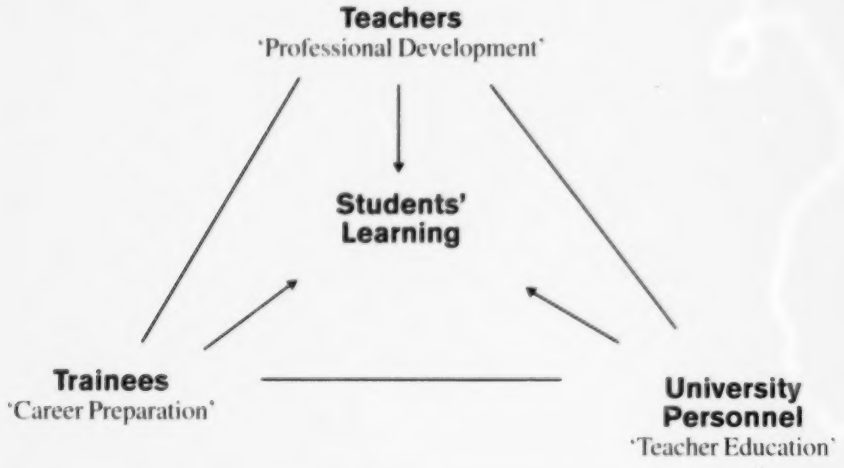
The structural design of the PDS integrates the functions of teacher preparation and professional development within a single professional community. However, because this design draws from the existing structures of school and university, it forces participants to redefine their roles and responsibilities within the PDS as related to—but also as distinct from—those in the existing structures. This redefinition of who does what raises the central question of defining the core purpose of a PDS.

Who teaches (or learns) what to (or from) whom

Initially the aims of PDSs have been framed in different and sometimes conflicting terms. Aims differ depending somewhat on where one sits. For some, the impetus behind the PDS design was to increase student success, to integrate populations of learners (from special education and mainstream classrooms) who were often taught separately, and to enhance student learning generally. This impetus led quickly and inevitably to concerns about teaching and to an interest in professional development and teacher education. For others, PDSs began as a set of institutional and professional relationships between a school or schools and a university department or academic program to better accomplish teacher preparation. Regardless of how they were initially conceived, within the new structure of the PDS, conventional school and university roles were recast. In a PDS, students interact with trainees and university personnel as well as with their teachers. Teachers have ongoing interactions with university personnel through their common work with trainees who are teaching students. University personnel are intimately connected to the classroom learning of students and trainees and share that role with teachers. Thus PDSs have created a variety of teaching and learning processes, all centered on the venue of the classroom and school (for this discussion, refer to Figure 1).

This variety in who teaches (or learns) what to (or from) whom has provided functional roles for all parties involved in the PDS. The initial PDS aims of enhanced student learning, teacher preparation, and development combined diverse, if overlapping, purposes in a new, hybrid design. However, this design has not necessarily challenged or realigned the existing roles or hierarchies within either the school or the

Figure 1. ***The convergence of purposes and functional definition of PDSs***



university. Within this PDS structure, the same people do different things: Teachers teach students, trainees, and in some cases university personnel; trainees learn from university personnel, teachers, and also from students; university personnel teach teachers, trainees, and also students; and so on. Although this fluidity of roles and responsibilities is viewed by many as an essential strength of the PDS environment, it creates a very basic tension: Is PDS work old work done in a new way, or is it, in fact, new work? The ambiguity in roles and responsibilities endures at the heart of PDS work and was widely reflected in discussants' comments in response to the survey data.

The place of school-based expertise

Perhaps because of the composition of conference attendees, the perspectives of teacher preparation and professional development were widespread.[7] However, it may also be that as an aim, teacher education is, at least initially, more easily articulated as a combined goal of the school and university. In contrast, although student learning was acknowledged as centrally important, it drew less of the Chicago discussants' attention. And similarly, the proposed goal of inquiry seemed still not clearly or transparently defined. Thus in the discussions, teacher education—whether preparation or development—continued to be the central concern. The central function of teacher education appears to have shaped most discussants' core beliefs, namely, that all PDS participants are learners, that teaching always entails learning (expressed as learning as an ongoing and mutual process), and that teaching is a cognitive (as contrasted to a behavioral) undertaking. How these core beliefs are enacted becomes the central challenge in defining and redefining new roles and responsibilities within the PDS design.

As the PDS redefines the principal venue for teacher preparation from the university lecture hall to the school and the classroom, the change is more than simply a geographical one. Discussants acknowledged the redefinition of roles and responsibilities of teachers, trainees, and university personnel that comes with these changes. When the school becomes a venue for teacher education, who has expertise and who teaches what in teacher preparation are reshaped. Situating the core of the teacher preparation process in schools creates a foundation of school-based expertise, which raises the basic questions of what knowledge counts in teaching and how it is best acquired. There was consensus among discussants that through this change, school-based expertise becomes fundamental and that teachers, therefore, must be centrally involved in the design, decision-making, and delivery of PDS teacher preparation activities and programs.

Structurally, school-based expertise is captured in three features of PDS teacher preparation: (1) trainees spend extended time in classrooms, working directly with students; (2) they are urged to go beyond their "instructional roles" as teachers to grasp more fully how their work as teachers is embedded in the school and the community; and (3) their professional learning is situated within a particular classroom and school setting, thus taking its meaning from the participants and interactions in that setting. As contrasted to the old view of classrooms as places to practice what was learned elsewhere, PDS classrooms provide situational frameworks within which trainees learn to teach. Since trainees are in classrooms for extended periods throughout their teacher preparation programs, they spend more and less hurried (and harried) time, assume greater and more complex responsibilities, and have richer interactions with students.

This pattern of collegiality and collaboration among teachers and university personnel represents a major step away from the isolation and autonomy that have been part of the conventional teaching cultures for both groups. These new roles can also blur the boundaries about who does what: Who evaluates the trainees' work? Who determines, and who delivers, the curriculum both in the teacher preparation program and in the classroom? And how are people compensated and rewarded for their roles and participation in this new set of responsibilities? Thus discussants felt that this new pattern of collegiality and collaboration, at its root, will and can lead to new—or at least redefined—forms of knowledge. However, how this school-based expertise about teaching and learning relates to—and may in due course supplant—conventional university-taught expertise seems to be an open question.

For students: More and different adults available

From the students' point of view, PDS classrooms differ in that they have more and different adults available: trainees, teachers, and university personnel all work alongside one another. Thus structurally, the PDS design has brought more adults into classrooms to work directly with students. Perhaps because of this increase in adult-student and adult-adult interaction, discussants argued that they could see more explicit levels of learning and teaching in PDS classrooms. Specifically, since within the same PDS classroom students are learning content and trainees are learning to teach, complex and varied forms of teaching occur simultaneously. This varied teaching requires that individuals play multiple roles. Teachers and university personnel teach content to students while they teach teaching to trainees. And often students

'teach" trainees about their own learning, through articulating what they are doing with the particular content. Thus within a PDS classroom, the role of "teacher" becomes transient; it is a temporary position that an individual—student, trainee, teacher, or university person—takes on in relation to a certain bit of content. This transiency contrasts with the permanent role that the different players have in the institutional hierarchies of school and university.

Even in the face of this protean fluidity, the hierarchical roles as defined by the school and the university do not go away. Discussants from both institutions commented on the real difficulties in gaining recognition for what they were doing. Perhaps as a way to secure such recognition, three distinct sets of labels for the learning that goes on in PDS settings have evolved. For teachers and university personnel, the learning they do is called "professional development." For trainees, their learning is called 'teacher education." And for students, it is called "classroom learning." This proliferation of terms seems to reflect the settings of university and school from which the participants come and that continue to exert the value through such definitions. The terms are meant to label who is doing what in ways that are recognizable to and fit into—and are therefore valued by—the conventional hierarchies. Arguably, however, they do not reflect viable distinctions in learning. In fact, these different and competing terms may well obscure the common core process of learning in PDS settings. In other words, the terms may focus attention on the content of *what* is learned, which clearly does differ depending on the role of teacher, trainee, student, or university personnel, while diverting attention from the common processes of *how* it is learned.

Searching for a common framework

The explicit work with teaching and learning on several levels, and the variety of roles that support it, needs to be rationalized within a common framework. The Chicago meeting, and the working paper* that preceded it, used inquiry as that framework. Discussants talked about children "doing inquiry" as part of the learning in the lessons (National Council of Teachers of Mathematics [NCTM] activities were one example). They talked about teachers and trainees engaged in inquiry, which provided information about students' learning through formative evaluation (action research projects were one example). And they talked about teachers and university personnel inquiring into the workings of the PDS itself to make public its activities, processes, and accomplishments through summative evaluation (documenting PDS work was an example). The fact that those who discussed the inquiry theme clearly struggled to find coherence may reflect the complexity of this transition toward a common, core PDS purpose. In moving from the PDS impetus to enhance teacher education and to improve student learning and professional development, the new structure of the PDS is struggling with "who is learning what and how they are learning it." Perhaps inquiry is a vehicle for that common purpose, a vehicle for defining the cross-cutting relationship between teaching and learning.

A final comment. Given this synthesis, it was interesting that in the view of many discussants, the role changes in PDSs affected the delivery of teacher preparation and not the knowledge base per se. As one person put it, "The knowledge base or curriculum is not different, but how and when it is delivered is very different." However, this assertion that the delivery is changed but the base is not, although it was believed to be true by many, may not be entirely accurate. New participants are

assuming key roles and responsibilities in the teacher preparation process via the PDS. If their work takes place within a common framework of inquiry, it is difficult to envision how the knowledge base will not change as school-based expertise is made more explicit and operational.

Issues from this thread for standards-setting

The preceding discussion raises several issues for standards-setting. In the conventional institutional hierarchies of schools and universities, teaching has been assigned to certain roles on the basis of the content to be taught—the "who does what" question; thus, mathematics teachers are assigned to teach mathematics because they know the subject matter. In PDS work, because roles are blurred, the focus is on teaching as a process. This creates what I call here "varied teaching," in which different individuals teach (and learn) different things at different times, depending on their relationships. This shifting set of linkages between who is teaching and who is learning injects a great deal of variety and complexity into the usually static architecture of schooling. It presents, at once, the strength and the challenge of defining roles and responsibilities in PDS designs.

Role versus process

How can teaching as a process be documented and assessed in relation to certain content as contrasted to teaching as an institutional role? Teaching as a process in relation to certain content refers, for example, to the student who "teaches" the trainee how he or she learns best to the teacher who "teaches" the university personnel how her classroom operates, to the university personnel who "teaches" the student a particular content lesson, and so forth. Teaching as an institutional role refers to jobs as defined by institutions. For example, the university personnel is the "instructor of record" for the university course, or in the view of the school and community, the teacher responsible for the class. If standards focus on the exercise of institutional role, they may obscure—or even destroy—the varied teaching processes that seem to lie at the heart of PDS work.

Learning

Given this varied teaching, how can the learning of various constituencies—for example, teachers and university personnel who learn though professional development, trainees who learn through teacher education, and students who learn through classroom teaching—be documented, assessed, and ultimately rewarded?

Does the diversity of labels for "who learns what"—for example, calling teacher learning "professional development" as contrasted to "trainee learning," which is called "teacher preparation"—actually strengthen the standards-setting process or does it create confusion?

It seems clear that PDSs would be well served, both politically and functionally, if a common core undergirded the surface diversity of role and activity.

Common purpose

How can standards adequately reflect and recognize the different institutional roles—for example, teacher, university personnel, trainees, and students—on the one hand, while emphasizing what is common and fundamental in the PDS undertaking on the other? Creating the PDS as a new institution does not erase the expectations and demands of the existing institutions.

Common Thread 2: Time, Results, and Rewards

As a new structure, PDSs create a basic tension in the definition of work, which carries over into how time is used, how results are measured, and what is valued and rewarded.

Revaluing time as professional autonomy

When discussants talked about the PDS as a new structure—"creating our own institution…outside the boundaries of the university and the school"—they voiced a basic tension in the definition of work. Because collaboration values time differently, it creates new demands in scheduling for common time to talk and work together. These demands contravene the conventional structures of autonomy and isolation in schools and the "egg carton" realities of classroom teaching. Much of the conflict can be traced to how time is defined and used. Currently, university personnel have some control over how they spend their time, whereas teachers have less control. In one PDS, for example, discussants mentioned the common but annoying fact that teachers had to sign out for meetings at the university during school hours; in contrast, university personnel could come to the school to meet without notifying the university.

Since professional autonomy seems to be measured in part by who controls how one uses one's time, the difference in latitude to schedule one's work, which divides along conventional roles in the university and the school, is exacerbated by PDS work. Further, because decisions about time on the macro-level of scheduling and curriculum planning are generally beyond most PDS participants' control, recalibrating the way in which time is defined and used in schools is a central issue in PDS functioning. One discussant, who identified herself as a teacher, said, "Time is the extrinsic currency for teachers. How the use of time can be changed in a PDS is a key to success." At present, collaboration between teachers and university personnel and the assumption of new and different roles within these two institutions, both of which are essential for PDS work, must fit within time allocations and schedules that most PDS participants do not control. Discussants spoke of needing to create a "new grammar of value" in schools through PDS work; time is clearly a central component. As one discussant put it, "It's about time. …Time constrains us and creates our reality."

Accountability

The ways in which teachers and university personnel use their time to accomplish their work are reflected in how their respective institutions assess progress and hold them accountable for results. On a basic level, if someone is expected to do X (teach students, for example) and does Y (teach trainees), then the questions arise of how X gets done and whether it will get done as well as it would if doing Y was not necessary. When roles and the use of time within the institutional contexts of the school and the university are redefined through PDS activity, a fundamental tension develops because both institutions continue to expect their respective participants to maintain the status quo. For schools, that status quo is assessed through how students are learning. That teachers, trainees, and university personnel are playing more diverse roles is secondary; unless this change can be tied to student learning, it is hardly significant. For universities, the status quo is assessed through the generation of new knowledge and practices. That teachers, trainees, and university personnel are playing more diverse roles is secondary unless it can be demonstrably linked to new knowledge.

Despite the transcendent value of learning, discussants concurred that it is generally problematic to assess the effectiveness of PDS classrooms solely on the basis of student outcomes. Such learning outcomes may well be shaped by factors beyond the particular classroom, or the assessment instruments themselves may not adequately capture the complexity of student learning. For these reasons, discussants argued that "pedagogical change is easier to assess than student learning." Thus they said that assessment should focus on pedagogical and curricular changes in PDS classrooms: how time is used; the kind, variety, and increased number of interpersonal (student-teacher/trainee/university personnel) interactions that occur; the different types of activity caused by more explicit and varied levels of learning and teaching; and so on. These pedagogical and curricular changes, however, may not be reflected in conventional measures of student achievement, such as standardized tests or other district and statewide mandated measures. Thus the challenge in PDS work is to become more sophisticated about how student learning is assessed in order to capture the different ecology of teaching and learning in PDS classrooms.

Measuring results

Underlying any assessment is the question of accountability. Accountability operates on two levels: that of the PDS classroom—what teachers, trainees, and university personnel do with students—and that of the PDS structure itself—how it better serves the multiple aims of student learning, professional development, and teacher preparation. For many discussants, particularly teachers, the unvarnished reality is that classroom teaching will continue to be the basic measure of PDS success. As one person put it, "Student learning is often looked at as an indictment of teachers." Another said, "Without accountability for student learning, PDSs cannot survive." The measurement of results is a central concern and is phrased in two ways. At the classroom level is the basic question, do more adults in the classroom make a difference [to student learning]?[9] At the PDS level is the question, what is the value added for the school or university [by the PDS design]?[10]

The structure of recognition and rewards in the workplace flows directly from how time is used and how accountability is assessed. Because PDS participants are using their time in new ways, they frequently find themselves outside the reward structures of their institutions. University personnel said that their PDS involvement generally goes unrecognized and unrewarded within the realm of university values (e.g., for promotion, tenure decisions, etc.). Similarly, teachers commented that their PDS involvement does not "fit with what is generally expected of a teacher" from the perspective of some colleagues, administrators, and the community. Thus it seems that by redefining roles, conventional boundaries in the ways that the work of teaching and teacher preparation are usually structured become blurred. For many discussants, this process is uneasy and incomplete at present. As one said, "We are caught between what is and what could be...waiting for our roles to change."

Issues from this thread for standards-setting

The thread of this discussion raises several issues for standards setting. The central dilemma seems to be how to connect new uses of time with the existing ways that outcomes are judged. This will entail reward structures that value new practices and uses of time within PDSs, even as these practices depart from the status quo expectations in schools and universities.

Time

How can time be accounted for and rewarded within the PDS design? What are "good" and "valuable" uses of time in PDS settings? How do these uses relate to, and perhaps contradict, the status quo measures of accountability in schools and universities?

Status quo and new measures

Given the expected and existing measures of student learning, how can the complexity of PDS roles and work be related to those measures?

What new measures can best capture the varied teaching and learning in PDS settings? How can these be related to status quo measures and expectations in schools and universities?

How can "pedagogical and curricular changes" be captured in PDS classrooms? How do they relate to PDS standards?

New rewards

How can or will PDS standards link core PDS practices to conventional reward systems?

Common Thread 3: Evolution, Acknowledgment, and Gate-keeping

As new educational structures, PDSs seek to be recognized. However there is concern that on the one hand, recognition should acknowledge different levels of development and that on the other, it should differentiate between genuine PDS work and work that is superficially similar but does not share the same basic underlying principles and commitments.

Individual perspectives: "Growing with experience over time"

Discussants concurred that acquiring teaching expertise is a developmental process, meaning one that, in their words "grows with experience over time." This growth can be found on three levels: participants in individual PDSs, particular PDSs, and the PDS movement as a whole. Thus it is crucial to capture the different levels of development at which various PDSs are operating. In the Chicago meeting, discussants sorted through these levels of development by telling stories about their own PDS work. These stories served to situate their experience and expertise in relation to others and to illustrate some of the common developmental issues. These stories touched on much of what has been discussed in common threads 1 and 2: roles (e.g., "What I am doing..." or "This is how we do it in our site..." stories); time commitments (e.g., "How I/we manage that issue..." or "What we have done about that..."), and rewards and recognition for PDS involvement (e.g., "I am really excited about..." or "Something that is working for us is..."). Although it is beyond the scope of this synthesis to analyze these stories closely, developing standards can be seen as an effort to get at their common elements and deep structure.

For individuals, the idea of development helps to frame the new roles and responsibilities. Trainees are seen as being launched into their careers through the PDS teacher preparation process (prospective development), whereas teachers look backward, drawing from the expertise they have developed over their careers to contribute to the trainees' learning process (retrospective development). Thus the accumulated experiences of the teachers and university personnel contribute in interpreting the trainee's current experience in the PDS classroom. Teachers and

university personnel describe the process by which they forge working relationships to make this situated expertise accessible as one of "developing mutual trust and respect." Thus development seems to provide the overarching metaphor for all participants—teachers, university personnel, and trainees—in the PDS teacher preparation process. As one discussant said, "All of us are developing, not just the preservice teachers." This raises the interesting question however, of how development differs from learning, if indeed it does.

Institutional perspectives: Development and gate-keeping

For PDSs as educational institutions, the issue of development is framed in more political terms. Discussants reported that PDSs are becoming the preferred delivery mechanism for preservice teacher education in several states.[11] As pressure to expand PDS-based teacher preparation increases, many discussants anticipate that issues of quality control and gate-keeping will arise. The question is raised: How can effective and solid PDS work be distinguished from substandard work or that of impostors? And, how can the new PDS that is developing acceptably be distinguished from one that has serious flaws in its design? There is also a related concern: How can PDS teacher education be kept from becoming a mere replication of status quo practices, if "developmental" means, in effect, learning to teach in and through school contexts? From the perspective of institutional development, the building of standards for PDSs is itself a response to the maturing of the PDS movement as a whole and to the question of what is—or should not be—a PDS. This we might call the gate-keeping perspective. At the same time, standards can serve the evolution of individual PDSs as education institutions; this we could call the developmental perspective.

Development and gate-keeping are closely intertwined; however, they can be conceptualized on two axes. (Please refer to Figure 2 for the following discussion.) On the vertical axis, the development of standards moves from consensus to leadership. This process is viewed in two ways: from the bottom up, evolving out of actual practices and contexts of PDSs, and from the top down, through statements of vision, goals, and aspirations for effective PDS work. The former are developed through participatory processes, whereas the latter are often associated with the good aspects of leadership and direction. Labeling these as two ends of the vertical axis does not imply that they operate independently of, or in opposition to, each other. Clearly they are interrelated, as the process to date of the NCATE PDS Standards Project demonstrates: the survey data and the discussions at the working conference capture bottom-up data from the field; statements of goals and vision are equally important to the process.[12]

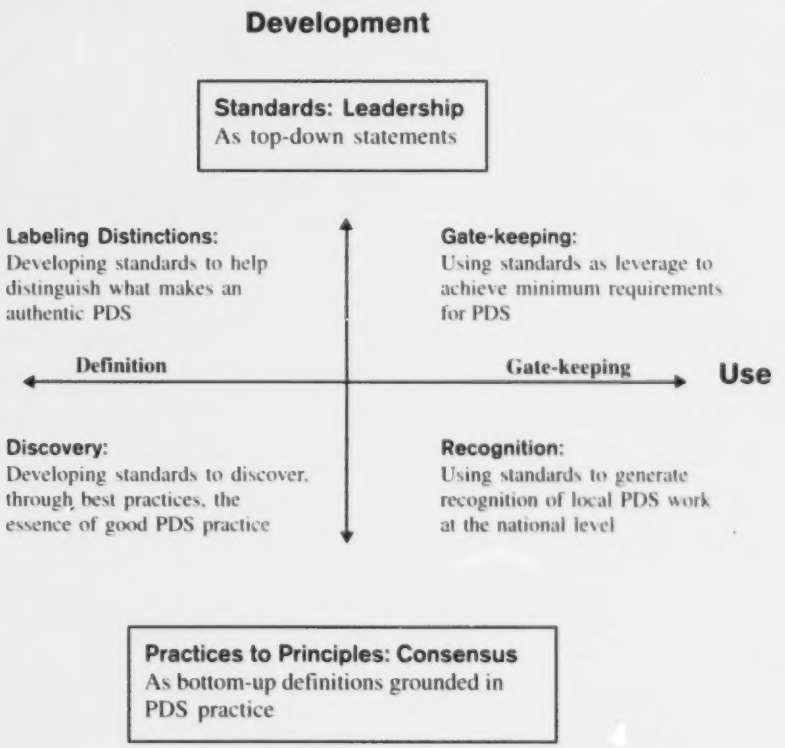
This vertical axis captures what one theme group referred to as the inherent "democratic/anti-democratic tension" in standards-setting, when the bottom-up push for consensus meets the top-down push for definition. On the one hand, standards will gain their legitimacy, at least in part, from how they capture best practices; on the other hand, they will gain their authority through distinguishing solid from substandard PDS work. This, in turn, raises the question of how bottom-up consensus and top-down definition are meshed and who makes the determination, on what basis, and to what effect.

This vertical axis represents the path of development that parallels the process of the NCATE PDS Standards Project itself. Starting with a survey to generate data

from the field on effective PDS practices was a bottom-up process, which several theme groups referred to as the "practices to principles" stage. However, it is clearly envisioned that at some future time, the resulting statements of standards can and will draw distinctions between PDSs; otherwise, why set standards at all? This is the leadership function of standards-setting. Whether these standards should be "readily attainable" or "something to shoot for" and "to inspire" was a matter of great discussion, with no consensus. Thus the vertical axis reflects the evolution of standards from practices to principles to vision and aspirations.

The horizontal axis captures how standards might be used; it moves from definition to gate-keeping. At one end of the axis, standards-setting is a descriptive enterprise. The aim here is to better understand what makes effective PDS practice; hence, a survey was followed by the working conference, which functioned as an enormous focus group to respond to and elaborate the survey data. This is the definition function. At the other end of the horizontal axis, standards are set to distinguish PDS practices from non-PDS practices and to ensure and reward quality enterprises. This is the gate-keeping function.

Figure 2. ***Setting standards-how they are developed and how they might be used***


Development
Standards: Leadership
As top-down statements
Labeling Distinctions:
Developing standards to help distinguish what makes an authentic PDS
Gate-keeping:
Using standards as leverage to achieve minimum requirements for PDS
Definition
Gate-keeping
Use
Discovery:
Developing standards to discover, through best practices, the essence of good PDS practice
Recognition:
Using standards to generate recognition of local PDS work at the national level
Practices to Principles: Consensus
As bottom-up definitions grounded in PDS practice

Two axes—Four quadrants

The diagram as a whole relates the functions of development and gate-keeping in the setting of PDS standards, a tangle of key and problematic issues with which many discussants grappled during the conference. Development speaks to these questions: How are standards assembled, on what basis, and by whom? Gate-keeping addresses related questions: How are standards used and for what purpose(s)? The two axes combine to form four quadrants, each of which captures a particular issue in standards-setting. I believe that it is a useful way to make sense of the many, disparate, and at times seemingly confusing questions, concerns, and issues that were raised in the working conference.

Quadrant 1: The issue of gate-keeping

In the upper right quadrant lies the issue of gate-keeping: When PDS standards exist, whom will they let in and whom will they keep out? This top-down use of standards will define what is or is not a PDS. Discussants spoke about how minimum standards can potentially be used to create leverage that can assist new or struggling PDSs to reach a basic level of functioning. However, such use can and will inevitably disenfranchise some PDSs that fail to meet the minimum criteria. Discussants recognized this result as useful in protecting good PDS work, but they also worried about the "anti-democratic" and exclusionary function inherent in rejecting some applicants.

Quadrant 2: The issue of recognition

Closely allied to gate-keeping is the issue of recognition, which falls in the lower right quadrant. As discussed in common thread 2, many discussants spoke of feeling unrecognized and under-rewarded for their PDS work. Thus as standards come from the bottom up, drawing principles from PDS best practices, they create the possibility of better and more extensive recognition for PDS work. Further, many discussants pointed out that building from good PDS practices at the local level will create better acknowledgment at the national level.

Quadrant 3: The issue of discovery

Discussants talked about the fact that in the process of examining their local PDS practices and comparing them with those of colleagues at the national level, as was done in the Chicago meeting, they were able to discover (lower left quadrant) what makes an individual PDS successful and, further, to discover the common lessons that can be learned across PDS sites. This bottom-up process combines developing standards with defining what is good PDS practice; it blends recognition (quadrant 2) with discovery (quadrant 3).

Quadrant 4: The issue of making distinctions

In the inquiry theme group, discussants shared several typologies of school-university relationships. One discussant argued, and several others concurred, that such typologies help to make distinctions (in the upper left quadrant) among stages of school-university relationships as they evolve toward full-fledged PDS structures. These labels are crucial in making intermediate distinctions among what are not yet full PDSs. The aim is not gate-keeping as much as it is identifying the developmental stage of the school-university relationship. Thus standards can serve a diagnostic purpose (quadrant 4), in contrast to the exclusionary purpose of standards for gate-keeping (quadrant 1). However, both purposes share the top-down impetus of drawing

distinctions among types of PDS work, whether to label developmental stages or to separate good from poor PDS practices.

Four-quadrant analysis: Connecting contradictions[13]

The four quadrants in this diagram distill the at times seemingly contradictory range of hopes and fears that discussants held for the standards-setting process now underway. Together the two axes and the four quadrants also shed light on how the development of standards (on the vertical axis) and the use of standards (on the horizontal axis) inform one another and stand in creative tension. For instance, we see that gate-keeping and making distinctions among PDS practices (quadrants 1 and 4) are two sides of the same coin. They differ subtly in how standards are used: to create leverage as an instrument of definition (quadrant 1) or to sort PDSs from non-PDSs (quadrant 4). Likewise, discovering what makes PDSs work (quadrant 3) and recognizing best PDS practices (quadrant 2) are also intimately interrelated. But here again an important, if subtle, difference can be drawn on the basis of how principles evolve from those practices. In the bottom-up process of standards development, discovering the common elements of effective PDSs leads to recognizing what those elements are. Thus the process that began with the survey and continued in the working conference discussions is leading to a common framework of understanding of present PDS work, independent of whether standards result from it.

Issues for standards-setting

This thread raises three keys areas to consider in standards-setting: defining development and what it means for PDSs as entities, examining the question of how PDSs gain or lose official recognition (in other words, are certified or decertified), and the interaction of how standards are developed and how they are used.

Development

- Are there definable stages in PDS development? What might they look like? Is it useful to recognize them in the standards-setting process? Or should PDS standards simply address the endpoint—full PDS status?
- Would it strengthen or dilute standards to have intermediate stages of recognition?
- How should standards frame PDS development? Should a core set of activities and values be mapped out over time, in stages (a trajectory model)? Or should a point of establishment be linked to a time frame by which certain practices are met (an endpoint model)?
- If they are developmental, how do standards capture, account for, and move individual PDSs from one stage of development to the next?

Recognition

- How would practicing PDSs be decertified? Under what conditions and for what causes could they lose official recognition?

Standards and their use

- What are the connections between how standards are developed and how they are used? Which needs—gate-keeping, labeling distinctions, discovery, recognition—should be served and in which order?

Common Thread 4: Core Values and Processes

To establish standards, PDSs must identify core values and processes that make the education they provide for students and for trainees unique. The complexity of this challenge lies in the varied levels of teaching and learning that take place in PDS settings (see common thread 1). However, it is precisely because of this variety that standards must concentrate on core values and processes, or they risk dissipation and misinterpretation.

The contrapuntal pull of roles

In the Chicago discussions, inquiry was framed as a potentially unifying theme for all PDS activities. Herein lie both its promise and the root of its current problems. The structure of PDS activity has evolved out of integrating two basic and closely related functions: teaching students and teaching trainees as future teachers. By conventional designation and design, teachers are responsible for the former and university personnel are responsible for the latter. Thus PDSs are essentially a hybrid structure to serve both ends, a design in which personnel play both roles. Inquiry is proposed as a way to fuse the two into a common purpose. As one discussant said, "The aim of inquiry is to know why you do what you do." However, although inquiry certainly has that potential, it appears from the discussions and documents that the common purpose is not yet fully embedded in PDS culture or operations.

This commitment to examining one's reasons can hold true across all groups in the PDS design: students, teachers, trainees, and university personnel. Thus it has the potential to truly become the core value for all PDS activities regardless of who does them. However, the commitment is complicated by the fact that each group already has reasons for what it does. These reasons stem from the demands of the status quo on its existing roles and responsibilities (see common thread 1) as well as from its institutional history (what it has traditionally been expected to do by its institution). This status quo is instantiated by the particular ways in which time is used and, therefore, by what people are rewarded for doing, in schools and universities (see common thread 2).

So discussants repeatedly voiced the fact that the existing roles and responsibilities of teachers and university personnel are essentially defined by the status quo as contrapuntal to each other. Teachers are expected to teach students, university personnel are expected to generate knowledge, and they are both supposed to teach trainees as prospective teachers. Although PDSs attempt to break down this contrapuntal pull of roles, the pull remains a force that is not compatible with inquiry.

Proposing inquiry as a common core: The fullness of the status quo

As a core value in PDS activity, inquiry faces two obstacles: the fullness of the status quo, which already defines what participants *should* be doing in their jobs, and the dynamic of differing goals between the school and the university as institutions. Together these two forces can crowd out the vision of a common purpose and value. Discussants talked about the "fullness of the status quo" when inquiry as a new purpose meets the ongoing demands of their jobs. Many observed that engaging in inquiry can be "piling on responsibility for something beyond your own job" or that "with limited resources, the energy doesn't go toward inquiry." The dynamic of differing goals is

closely related. Because participants already have ways of reasoning about what they do that are based on their existing roles and responsibilities in their host institutions, they find defining a new common purpose ambiguous. As one said, "Inquiry means a lot of different things to different people depending on where they sit."

Although inquiry as a core value may seem illusive at this point, a firm foundation on which to build already exists. Underlying inquiry was a strong and existing process that seems essential to the nature of activity within PDSs. The discussants spoke of the "informal" and "continuous" nature of PDS interaction and development. They mentioned the recurrent themes of the collegiality and collaboration inherent in PDS work (see common thread 2). They contrasted these fluid and essentially equal interactions with the conventional event- or topic-driven "formal" types of professional development activities and the hierarchical styles of university-school interactions found in most settings. In the shift to the PDS collegial interaction in PDSs, different types of knowledge and understanding of teaching and learning become valued. "Formal" professional development underscores knowledge that is external to the school context and that is supplied through presenters at events on particular topics. Informal professional development emerges out of the resources and needs of the PDS setting and therefore is intrinsic to the PDS.

Thus the knowledge that is embedded in, and emerges from, the school context is highly valued by PDS practitioners on both the school and university sides. Collegiality and collaboration are interactional processes that generate this school-based expertise. Inquiry is proposed as a form that can structure these interactions around a shared goal. The question remains whether PDS development, and standards in particular, are better served by a common goal that stretches current practice or by one that more closely captures the current essential aspects of PDS work.

A Final Thought

In looking to establish this common core of PDS work, I found it notable how little talk took place about the role of administrators in either schools or universities. Discussants said very little about leadership as a catalyst in establishing a common core for the PDS endeavor. In contrast, several discussants mentioned university administrators as being instrumental in triggering change (as in, "The dean challenged us to handle trainee supervision in a different way...") and in making resources available, but mention of their leadership in establishing the PDS as a new form of educational enterprise was noticeably absent. One has to wonder what role the leaders in the existing institutional structures and cultures of schools or universities will play as PDSs are recognized as new entities and how they will respond to the standards-setting process.

Issues for standards-setting

Given the complexity of PDS work, it seems to make sense that standards will be well served by articulating a common core of activity. That core, however, must respect the current levels of PDS development and practice, even as it reaches for a unifying concept. The core concept needs to be on the cusp of what is possible, recognizing what is true in the status quo and, at the same time, extending it. This tension returns us to the basic question: Is PDS work new work, or is it old work done in new ways?

Common core

- How can the common core values that integrate all levels of PDS activity be articulated? Should the core start with what is or should it aim at what could or should be?

Values and processes

- How can core values, such as collegiality, be related to core processes, such as collaboration and inquiry?
- Should core values be aimed to the future (i.e., as a goal for PDS work to strive for, recognizing that they are not now the norm), or should they be grounded in the present (i.e., capturing the norms of current practice)?

Notes

[1] A small number of participants were members of both groups.

[2] At the 1996 AERA annual meeting, the conference program included 54 sessions on the topic. Many other sessions addressed issues that are related and relevant to PDS work.

[3] Teitel's (forthcoming) paper *Changing teacher education through professional development school partnerships: A five-year follow-up study*, which appears as an appendix to the conference working paper on *The institutionalization of professional development schools*, gives background on the PDS movement.

[4] For a detailed discussion of the sampling for this survey and a synopsis of the data analysis, see "NCATE PDS standards project: Preliminary survey findings" (February 1996).

[5] These included working papers on finance (R. Clark, in press.), institutionalization (Teitel, Reed, O'Conner, & others, In Press), inquiry (Berry, Boles, & others, in press), and standards (Synder, Wickford, & William, In Press)

[6] The recorders in the theme groups did valiant and extremely useful jobs. However the resulting material from the groups differed in scale of detail, organization, and format (some offered a sort of running record and others tended to summarize discussions). When combined with the synopsis of the survey data and the working papers, the data were hardly commensurate or easily amenable to grounded analysis in my view.

[7] In fact, the theme groups of teacher education and professional development were initially oversubscribed. Members then reassigned themselves to achieve a better distribution. The initial imbalance could indicate participants' backgrounds, interests, professional concerns, or simply the perceived accessibility of these topics.

[8] See the working paper on inquiry (Berry & others, in press)

[9] This question is quoted directly from the theme group on student learning.

[10] This question is taken directly from the white paper *Professional Development Schools: Costs and Finances* (Clark , in press, p. 20).

[11] Discussants from Texas, for example, reported that their state will soon require all preservice trainees to take part in PDSs to be eligible for state certification.

[12] See, for example, the NCREST *Vision Statement for the PDS Network* (NCREST, 1993)

[13] It is interesting to note that these tensions reflect those found in language use generally, between descriptive systems of language, "how people do talk," like those done by ethnolinguists and anthropologists (the left-hand two quadrants), and prescriptive systems, "how people should talk," like those done by grammarians, English teachers, and William Safire (the right-hand two quadrants). More seriously, however, these four quadrants capture the issues raised by the Santa Barbara PDS in the working paper on standards; see the section of this paper on "Language and Nomenclature."

References

Berry, B, Boles, K., Edens, K. Nissenholtz, A., & Trachtman, R. (In Press). *Inquiry and professional development schools.* NY: NCREST

Clark, R. (In Press). *Professional development schools: Policy and financing.* NY: NCREST.

Murrell Jr., P.& Borunda, M. (In Press). *The cultural and community politics of educational equity: Toward a new framework of professional development schools.* NY: NCREST.

Snyder, J., Whitford, B. L., & Williams, R. (In Press). *Setting standards for professional development schools.* NY: NCREST.

Teitel, L. Reed, C., O'Conner, K., & Boles, K. (In Press). *Institutionalizing professional development schools: Success, challenges, and continuing tensions.* NY: NCREST.

NCREST. (1993, April). Vision statement for the PDS network. *PDS Network News, 1* (1), 1-8.

Appendix: Specific Statements on Standards From the Theme Groups

The following specific statements are from the four theme groups on what PDS standards should do.

Student Learning: Standards should—

- articulate with, and link to, current forms of assessment;
- create a comprehensive picture of student learning, trainee learning, teacher/professional development, and school renewal.

Professional Development: Standards should—

- recognize and reward new uses of time (university and school);
- recognize and reward new roles.

Inquiry: Standards should—

- embed inquiry as a multileveled process;
- speak to internal and external audiences;
- create quality assurance.

Teacher Education: Standards should—

- reflect the impact of the PDS on university culture and its reward system;
- articulate with, and link to, current forms of credentialing, such as NCATE standards for teacher education.

Accreditation Standards and School Improvement

Putting Methodology in Its Proper Place

Thomas A. Wilson

During the last ten years, more than 300 new professional development schools (PDS) have been deliberately established across the country. Each school is based on a partnership between a university and a school district. The developmental nature of a PDS is clearly set forth in the charge to each PDS: establish better approaches to teacher education within a new institution that includes an actual school. Although problems have arisen, many regard the PDS approach to institutionalizing reform in teacher education as the nation's most interesting attempt.

In the early 1990s, advocates of PDSs began to stress the importance of accrediting them for two reasons: (1) Setting standards for PDS accreditation would protect the integrity of the defining elements of PDSs against natural diffusion; (2) PDS accreditation would strengthen the public legitimacy of the PDS movement. Because PDSs have new purposes and new functions, new accreditation standards are necessary.

In 1994, AT&T awarded the National Council for Accreditation of Teacher Education (NCATE) a grant to develop PDS accreditation standards. As the recognized national agency for accrediting teacher education programs that exist within institutions of higher education, NCATE was the logical organization to undertake this task. The PDS Standards Project is the outcome of the detailed and thoughtful process that NCATE designed. The project established a working group to construct PDS standards. Research was commissioned to identify the relevant PDS literature, to define the characteristics of PDSs as seen by the schools themselves, and to consider the nature of standards for PDSs.

This paper is part of that effort. The standards project asked me to attend some working group meetings and to provide a "provocative synthesis" of the issues facing the group. By considering the standards project from the perspective of the national discussion about standards and accountability, this paper would contribute to the national discussion and would provide further grist for the working group.[1]

To meet these objectives, this paper is grounded in the first working group meeting in March 1996. Although it takes into account later meetings and other project reports, it is set in this meeting.

The perspective I bring to these issues springs from my three-year study of the methodology of the English school inspection process (Wilson, 1996a). This perspective has been significantly shaped by my work during the last three years with several American groups to review and redesign their traditional accountability practices and policies so that accountability contributes maximally to supporting school efforts to improve student performance.[2] My work with both NCATE and the association that accredits schools and colleges in New England (NEASC) has sharpened my awareness of the importance, both past and present, of accreditation in American accountability.

The focal issue of this paper emerged directly from the discussion at the working group's first meeting. It is given that accreditation standards and processes assume a

degree of stability over time and that PDSs are intended to be evolving, not static, institutions. The question is, how can standards and processes support continuing improvement in a changing PDS? Although this question has a particular genesis in the concerns of the working group, it is a crucial question for the nation as well. How can the accreditation process and standards be relevant in an era that requires dramatic change and improvement in schools? Is it enough simply to certify that a school has met preset association standards? Can the purpose and process of accreditation be reconstructed so that they more directly support efforts to improve the quality of teaching and learning in schools?

The Working Group Defines the Issues

There must have been a time when it would have been reasonably easy to set accreditation standards for an institution that had none. I can imagine the leaders of an accrediting association sitting down, agreeing on the most important standards, and setting up the necessary staff to carry out the time-proven processes of institutional self-review, the accreditation team visit, and the association's decision to award accreditation. These meetings would be quite efficient. There would be no need for studies or consultants. The members of the group would do what needed to be done in a just and proper way. Any issue that provoked the process would be dealt with behind closed doors.

In contrast, this age of education reform has focused great concern on school improvement, standards, the inclusion of stakeholders in policy decisions, and accountability. The process of setting standards has become much more complicated. Not only are many more people involved, but the constructs of improvement and accountability are neither neat nor proper.

This section describes what the working group faced at its first meeting. It begins with a brief description of the traditional accreditation process. The characteristics of a PDS, identified by the group, lead directly to the important questions that faced the group.

The Traditional Accreditation Process

Understanding traditional NCATE accreditation and how it works is central to understanding the working group's dilemma, since this is a crucial part of the group's setting. NCATE offers accreditation for the college and university units (departments, programs) that provide teacher training. A professional, private (non-government) organization, its purpose is to ensure a level of institutional quality in its member institutions. It sets standards, conducts appraisal visits of the institution's teacher training units, and decides whether each reviewed establishment is worthy of accreditation.

Setting standards is central to NCATE's organizational purpose and function. The prime purpose of the accrediting process is to assure the public that its member (or applying) institutions meet the accreditation standards at an acceptable level. Accreditation, then, is a process for monitoring the quality of member institutions to ensure that they are up to standard. A program or unit seeking accreditation for the first time, or, as is more often the case, seeking to renew its accreditation, conducts a self-study to determine how in its own view it meets each standard. An accreditation

association visiting team, set up by association staff, visits the institution to validate the self-study report and to recommend whether or not the association should grant accreditation to the unit. The visiting team usually sends its report to the institution for review. In responding to the report, the institution may provide evidence that it thinks the visiting team might have overlooked or misunderstood.

A standing committee of the NCATE board of directors reviews the accreditation visiting team's report to decide whether the institution has met the standards and whether or not to confer accreditation. When an institution is accredited, it becomes an NCATE institution. The NCATE board may identify conditions the school must meet to comply with the association's standards. Accreditation legitimizes the institutional unit in the eyes of the public, it certifies its graduates' degrees, and it makes it easier for the school to attract not only students but also funding.

Much of the traditional NCATE accreditation process fits the nation's general mold for school accreditation, including the process that is used for accrediting most high schools. Spurred by the reform movement, with its frequent discussion of standards-based reform, traditional accreditation is undergoing important change. The great desire to raise school standards raised new questions about what standards are, what the process for setting them should be, and how they might serve as useful tools for reform. Accrediting associations have responded to this increased attention on standards by refining their own set of standards and some of their procedures as well. Although not without creating some controversy, in 1995 NCATE reconstructed its accreditation approach through a major redesign of its standards for teacher training institutions (Gardner, Scannell et al., 1996).

The working group was well aware of both the nature of traditional accreditation and the shape of the new discussion about standards for schools.

Professional Development Schools as Evolving Institutions

In its discussion, the working group, which included a high proportion of people from PDSs, was quick to assert that PDSs are not the stable, well-articulated institutions that have been the norm for standards-setters over the years. PDSs are themselves products of the national reform. Many believe that schools cannot become better until teachers are better and that teachers cannot become better until how they are educated becomes better. The central challenge of a PDS is to build, in practice, better teacher education institutions. This requires that the PDS learn from its experience and change in positive directions as a result. This defining characteristic of a PDS as an evolving institution must be considered if the accreditation standards are to make sense.

A PDS is founded to build a new institution that is charged with finding better ways to—

- improve teaching and learning in schools,
- prepare new teachers for schools,
- provide continuing development for practicing teachers, and
- engage in inquiry and research that supports the profession of teaching.

The following working group observations make clear how the group perceived the evolving nature of PDSs:

- PDSs are new. Most are still establishing their institutional identities.
- PDSs are complex, often fragile, and sometimes even marginal institutions.
- A PDS is built on a collaborative foundation forged by two distinct and existing institutions (school districts and universities). Part of a PDS's function is to develop this relationship so that change will result in both collaborating institutions, that is, in the school and in the university. The collaborative nature of this relationship increases the variety of institutional structures found in PDSs.
- Because PDSs are based in two very different institutions, understanding the particular dynamics of each PDS becomes even more important. Each PDS is a unique solution to the issues that exist between a particular university and a particular school district. Understanding this uniqueness is crucial to understanding what the PDS is attempting to achieve and how well it is progressing.
- The purpose of a PDS is developmental: to find better arrangements, practices, and programs than those in common use. A PDS is expected to continue improving what it has done and to build new institutional support for what it has accomplished. A PDS is formed to contribute to the overall reform of the nation's schools.
- As a developing institution, a PDS is open-ended. If it actually works well, it will produce unexpected results. Therefore, its most important results cannot be judged against normal, static standards.
- The definition of the level of excellence in a PDS must be open-ended. A PDS is committed to breaking through old standards of excellence for professional performance to set new ones. It is like Cadillac, whose advertising slogan is "creating a new standard of excellence."
- The ideas behind PDSs initially receive strong support from both the university and the school district that are planning to open one. The problems come during implementation, when the realities of shared resources, changed relationships, and territorial issues dominate the discussion. Standards that support development must go beyond rhetoric.

The Key Questions

The evolving nature of PDSs is the overriding reality that convinced the working group members that they must develop a process that in some measure supported the PDS in its development if they were to justify its cost in time, focus, and resources, and if it was to be accepted by the PDSs. The working group's perception of what was needed careened into the purpose of traditional accreditation: monitor an institution's compliance with established standards. The resulting jolt formed these key questions:

- Can accreditation *support* a developing institution and at the same time *monitor* its standards of quality?
- Is it possible to construct an accreditation methodology that meets the dual purpose of monitoring and supporting?
- Do PDSs require a different type of standard than that traditionally associated with accreditation?

The working group saw that the solution was not simply to reject the accreditation tradition. Although an accreditation association had hosted its work, the working group also believed in the value of monitoring standards. The potential of making PDSs more legitimate was important. The task was clear. Could the working group create a process that offered both functions: support and monitoring? A new process that met all their hopes and requirements would support public purposes, win support in the field, support crucial institutional development, and continue the traditional functions of accreditation.

The Working Group Considers Several Alternatives

Realizing that the problem was one of design, the PDS project arranged for the working group to consider several different approaches to institutional assessment and accreditation, including the accreditation of teaching hospitals, the Baldrige Awards, traditional English school inspection, and American school quality review. Highlights of the presentations that helped clarify the group's task follow.

Medical Accreditation

The Director of Medical Education at George Washington University Medical Center briefed the working group on how teaching hospital programs are accredited. Even though the teaching hospital has served as an important source of ideas for the PDS movement, the presentation pointed out several important differences between hospitals and schools in the context of how accountability is viewed and practiced.

These differences exist because professional medical practice is perceived to be much more developed than educational practice. It is more highly valued. The system for generating new medical knowledge and for teaching accepted medical practice to novices is also better developed. Since there is agreement about what constitutes accepted and expected medical practice, medical malpractice is possible. The possibility of a malpractice suit serves as an ominous guardian that pushes both the doctor and the medical institution to perform well. The real possibility of malpractice suits greatly affects the context of medical accountability.

Education has nothing comparable to the powerful incentives and disincentives of malpractice. Accreditation is only one structure among many that ensure the quality of a teaching hospital. A teaching hospital pays attention to the daily practice of its doctors in many more ways than a school pays attention to the daily practice of its teachers. The benefits of accreditation are built more fully into a medical institution. For example, Medicare funding is conditioned on accreditation. Accreditation is more tightly related to a hospital's daily practice of providing health services than it is to a school's daily practice of providing education.

Although teaching hospitals may provide an ideal image for the PDS movement, they have such a different institutional base that they appear to have little direct value for helping the working group address its dilemma. Medical accreditation does not grapple with the problem of how to support a developing institution or how to ensure that it meets standards. It does point out that differences in the institutional contexts

for accountability make a great deal of difference in how new systems of accountability are designed.

Baldrige Awards

The director of the Baldrige Education Pilot Project presented the approach of the Baldrige Award for ensuring institutional quality. In 1987 Congress instituted the Baldrige Award to stimulate quality management in business. The Baldrige Award organization designed and implemented a process to reward excellence in business management. In 1995 the organization turned its attention to schools, with the plan of developing a program to reward school excellence. They developed an initial set of criteria for schools and a pilot process for making awards to schools (Baldrige Award, 1995). Schools seeking an award were to provide written responses to these criteria to be judged by examiners. Schools that passed the first stage were to be visited. On the basis of a report of the visit, a committee would select the schools that would be given the award. All schools that applied would receive some feedback. Because congressional support for the Baldrige Award has subsided since March 1996, it is not clear whether this plan will be implemented, and if it is, how fully.

When the working group considered the Baldrige Award as a possible approach to solving the problem, several interesting issues became apparent. Baldrige is not a system of school accreditation, but an incentive, voluntary approach to institutional quality that was designed first for private corporations. In contrast, the accreditation process is based on the public's need to be assured about the quality of public schools. It is worth noting that the public's interest in schools is not the same as its interest in businesses. Whereas the public might be pleased when a business is committed to improving its product, its management, or both, the public is not responsible for that change. However, it is the public's basic responsibility to provide quality schools. The Baldrige criteria do not include this crucial notion of public goals. Schools must maintain their ties to the public interest to determine their essential purpose.

The Baldrige approach is sensitive to improvement within an institution. It is built on a conceptual model of how organizations function well. Instead of being based on standards, the award is based on criteria set forth in seven categories: leadership, information and analysis, strategic and operational planning, human resources and management, educational and business process management, school performance results, and student focus. Although noting that the Baldrige criteria for schools put too much weight on management, several members of the working group saw the criteria as potential nominees for PDS standards.

English Inspection

Traditional English inspection is a pre-social science methodology for learning about teaching and learning at a school and for judging the school's quality. Profoundly different from the American tradition of accreditation, traditional inspection challenges several key assumptions that Americans make about how best to know and judge schools. (These differences will be discussed later.)

Inspection was created when primary schools were being established throughout England. The central government sent inspectors to visit the new schools because it wanted to know what was happening and to help the schools develop in appropriate ways.

The explicit purpose of inspection is to raise the actual standards of a school. Identifying these standards and how they relate to what in fact is happening in a school's classrooms is the first order of business. The actual standards of a school are more important than the codified standards the government has set to improve school performance. An inspection team fashions its feedback to each particular school so that its report will contribute directly to that school's improvement. (Although significantly different, the British examination boards are a closer parallel in function to American accrediting associations than is the inspection process.)

The judgments about the quality of teaching in a school ultimately rest on the professional standards of the individual inspectors. These judgments are moderated through discussions on-site with members of the inspection team. The professional standards that inspectors use have evolved from their own significant teaching practice, from their experience in inspecting schools throughout England, and from current codified standards. The set of standards that come to bear on a particular school are sorted out during the actual inspection of that school on the basis of actual knowledge of the school, not pre-ordained benchmarks. For example, if an urban school has had a problem with a large rate of student turnover, an inspector might decide that she must include a different standard for staff professional development than she would for a small, stable rural school. The process of sorting standards—deciding what standards, as well as what level of achievement, are most appropriate for the school being inspected—is made manifest through the continuing discussion among the inspection team members. Thus, the nature of the individual school is carefully considered within the complex array of standards held by the inspectors at that school. It is worth noting again the strong connection between the type of standards being used and the methods for knowing and judging an institution.

We will return later to that theme, as well as to a more detailed comparison of traditional English inspection with traditional American accreditation.

Quality Review

School quality review is an interesting adaptation of the school visit in English inspection for American schools. The working group learned how that work is progressing in New York and southern Maine.[3]

Although school quality review in New York is different from that in Maine, both models offer important evidence that school visits can work in American schools and that they can have strong positive effects in schools. These approaches emphasize using information to help schools strengthen their work, rather than to hold them accountable. In both states, school quality review, like accreditation, appears to rely on teacher-set and school-set standards and goals (e.g., to improve SAT scores for the college bound) rather than on standards based in the public domain (e.g., the school must push each student to achieve as much as possible) to determine the focus of the school visit.

Although these presentations clarified the nature of the dilemma that the working group faced, none of these alternative approaches offered an easy solution. The group realized that its problem was to design a process that addressed the unique situation of PDSs.

In addition to the foregoing presentations, the project staff had commissioned several papers directly aimed at helping the working group: a discussion of the nature and value of standards for PDSs (Sykes, 1995), a review of the research literature about

PDSs (Teitel, 1996), the findings of a study to identify the key characteristics of PDSs (Trachtman, 1996), and a summary and reflection of a working conference of school participants that discussed the characteristics and standards of PDSs (Freeman, 1996).

Eight Reflections On The Issues

The following eight, loosely related essays are intended to provoke questions and provide new perspectives for the working group.

1. The Question of Accountability and Accreditation

The working group's discussion exists within the larger context of a national discussion about how accountability will push schools to achieve better results. In earlier days, school accreditation was the main arena for school standards. Since a major part of the initiative for setting standards has been taken over by the national standards movement, the accreditation associations have found themselves in something of a reactive position.

The "reform by standards" movement is based on a strategy that asserts that the most powerful leverage for school improvement is for government agencies that are responsible for school funding to set standards for student performance. Using standardized tests (mostly) to measure student performance, these agencies could see if schools were delivering on the public investment.

Over the last six years government agencies and professional associations have indeed set a myriad of standards for student performance. Attention is now shifting to the schools, where the ultimate efficacy of this strategy will be determined. Will schools take these new standards seriously? Will they lead to improved student performance? This shift in focus to schools and classrooms raises the central question of modern school accountability: Can the practices and policies we label accountability actually influence the practice of teaching and learning in a school so that student performance improves? In short, is accountability an effective tool for improving schools?

This shift of focus to schools provides a new opportunity for accreditation. Although accreditation associations have sometimes been criticized for their methods, their central focus has always been on the quality of what is happening inside a school. Knowing something about that, accreditation associations are uniquely positioned to contribute to a new accountability. But first they must grapple with how to strengthen the design of the process through which schools are known and judged. The NCATE working group is one of the first efforts to do that.

Seen from this national perspective, both the difficulties the working group faces and the potential contribution of its work become clearer.

2. Why Monitoring Is Considered to Be Different From Support

It is easy to see why the working group encountered the question of whether an accreditation process can both support and monitor a school. Shaped by its membership of thoughtful practitioners from PDSs, the working group was convinced that any process it proposed would be viable only if it included information useful for directly supporting the developing PDS. Educators most often think about monitoring and

support as two separate and sometimes competing processes. Accrediting associations do accreditation, which is monitoring, and consultant teams provide technical assistance, which is support. This section explores the idea that this separation derives largely from the difficulties inherent in the way American educators define the legitimacy of knowledge about what American education institutions do and accomplish.

One provocative way to understand this separation is to see the preceived distinctions between monitoring and support as a problem in the methodology of how we know and judge schools. This problem rests in assumptions educators commonly make about what legitimate knowledge about schools is and about how that information should be collected and used. Approaching the problem from a methodological perspective makes it possible for the working group to build a legitimate methodology that combines monitoring and support. As we will see later, other methodologies for knowing schools indicate that this is indeed possible.

Before we consider how to build a legitimate approach that combines monitoring and support, we will consider further from this methodological perspective why they are now seen as being separate.

First, notice what happens when someone poses the notion that it might be possible to build an information system that both monitors and supports schools. This idea is usually attacked on the basis that the information used for these two functions must be different because the dynamics of assisting improvement will corrupt the objectivity that is necessary for monitoring.

That raises a question about the nature of the information that educators value for its objectivity. This information is most often about results. It is usually standardized test scores of student performance. Systems that monitor schools usually include a trigger for mechanisms of accountability that are supposed to have real world consequences. It is commonly believed that rigor and fairness require that the information that is used for monitoring must be as objective as possible. Standardized student test scores are virtually alone in meeting this criterion of objectivity.

It is the task of experts—researchers and statisticians—to create this type of objective information. This certainly lies beyond the knowledge and skills of most teachers, school administrators, and citizen decision makers. Since no other approach is available, school practitioners will usually accept the value of this objectivity, even though they will argue over and over again that it is not relevant to their daily work. "What do researchers really know about what I do or face every day as a practicing teacher?" Even teachers, who accept the validity of standardized testing, will often legitimately ask, "What do standardized test results show me about what I should do to improve my teaching and the learning of my students?"

Legitimate information about schools and other teaching and learning institutions is commonly expected to meet these straightforward requirements:

- It is good information.
- It is objective.
- Objectivity is gained by following the parameters for defining and collecting information that are based upon the supposedly immutable methodology of scientific experiments. This methodology includes validity, reliability, precision, and control.

The first and second requirements present no real difficulty for developing a methodology that serves both monitoring and support. The difficulty rests with the third, which limits the definition of objective information to that which is collected in a manner consistent with the rules of evidence for research experiments. For example:

- The methods of collecting information are designed so that the information produced is *reliable* and *valid*.
- Variables under study are defined precisely in operational terms.
- Extraneous factors and dynamics are controlled to minimize their effect.
- The collection and analysis of data are structured to remove human judgment as much as possible and to ensure that the results can be replicated.

These methodological rules, with their implied definitions of the information generated by them, have been useful analytical tools for testing hypotheses, for building generalizations about phenomena, and for constructing theories about schooling as well as teaching and learning. They are mostly the province of researchers who seek generalized information about phenomena that will hold up over time. They are less useful as rules for generating information that helps schools and school people improve their practice.

We recognize that it is possible to generate information about the daily world of practice, as experienced by practitioners (i.e., a case study). Since this information is about what a practitioner does, not only about the results of that practice, it has a greater inherent value for supporting the improvement of teaching and school practice. This type of information builds an understanding of what teachers and administrators do during an actual school day—for example, how teachers actually critique student written work. It is this type of information that appears to be most helpful to practitioners. It includes a judgment about how well a practice works and it can be directly used to support teachers in improving their practice. A teacher's response to the problems a particular student is having is based on what that teacher knows and is able to do. The most critical body of knowledge, the knowledge most directly associated with what a practitioner does, is the individual practitioner's knowledge of his practice. While knowledge of theories of education or teaching are important, they only become useful when they are placed within a teaching and learning context. When a school is successful in improving the quality of the teaching and learning it provides, it has found a way to support how teachers learn about their practice. A teacher learns most effectively when what he learns is directly ties to the successes and failures of what he actually does as part of his practice.

Attempts to generate information about the actual life of schools, or about how schools perceive themselves, often have sought desperately to meet the classical, experimental notion of objectivity. For example, school participants are required to answer survey questions that have been designed to elicit objective information about their school, or even about their practice, that will result in objective conclusions. This definition of objective is based on the experimental criteria already described.

Attempts to support school improvement are confined by this type of information because it is the type that is available and valued. This results in simplistic schemes for improving practice. Since this type of information rests upon the skills of outside experts, a strategy must be designed for intervening in the practice of the school so that the school will adopt new practices. These intervention attempts,

usually supported by grants or contract funding, must be evaluated. The legitimacy of evaluation procedures is also based on the experimental view of objectivity.

Thus, the support effort is buffeted on both sides by a narrow and inappropriate objectivity. One result is the "good practices" approach to improve practice. This has several connected steps. Objective research is carried out to identify "good practices" in a school. These practices are then introduced into other schools, where teachers are urged to replicate them. Expert, external technical assistance is made available. Although this approach creates a sense of certainty in what is an uncertain enterprise, it does not lead to a thoughtful, effective improvement process. In fact, it ignores the important characteristics of practitioner knowledge and learning.

It overlooks what the actual practitioner knows and is able to do. It also overlooks knowledge about the particular history and dynamics of the specific education institution under consideration. Finally, it does not model a way of thinking that will help teachers learn how to improve their practice by *learning from* their practice.

These notions of objectivity do not offer useful guidance for the development of infomration that would support practitioners.

It is reasonable to conclude that the separation of support and monitoring is created in large part by constructs of methodology—how inquiry knows what it knows. Different groups of educators, practitioners, researchers, and policy makers have different views and place different value on different kinds of knowledge and ways of knowing. Supporting the practice of school practitioners requires different kinds of knowledge that are based upon different rules for what makes knowledge legitimate than what works for researchers and policy makers.

To say it too simply, the researchers' requirement for objective knowledge has dominated other definitions of what makes knowledge legitimate. One result is that critical practitioner knowledge is devalued. Another result is that information that is considered legitimate for monitoring becomes almost counter-productive because it does not stimulate the growth of knowledge that is most directly tied to the improvement of individual practice.

We see monitoring and support as separate and unequal because of the assumptions we make about what makes information legitimate and thus what gives information value. The deliberation of the working group brought this issue into focus affirming the potential of Professional Development Schools to place new perspectives on the table about the basic assumptions behind how we conduct the American education enterprise, including how we know and judge schools.

We will now turn our attention to see if it is possible to work from a different methodology for knowing schools that does not preordain this dysfunctional separation of monitoring from support but holds them together in a more productive tension. It is based on very different assumptions about how information is made legitimate.

3. How English Inspection Does Both

Inspection began with the idea that its function was both to support and to monitor schools. When the charge was given to the first inspector more than 150 years ago, he was told explicitly to do both simultaneously. Support and monitoring have coexisted ever since, although in frequent tension—a tension that many would argue is productive (for more detail see Wilson, 1996, pp. 165-173).

The traditional methodology of inspection for knowing and judging schools has evolved over many years to meet this dual purpose. It was the legitimate basis for a national system of school accountability.[4] Inspection can combine monitoring with support because good information about what is actually happening in a school and good judgments about how well a particular school is performing are central to both. The methods for collecting legitimate information are not defined by the requirements of objectivity but by common sense observation and discussion among inspectors, who are mostly experienced teachers, who know schools, and who know when teaching and learning go well.

There is evidence in English inspection that both monitoring and support will have more integrity and power if the purpose of each becomes the same—to improve the institution. This leads to a cohesive methodology for acquiring information about teaching and learning that is focused on the actual life of a school, on the practice of its teachers, and on the learning of its students.

4. How Traditional Accreditation Compares With Traditional Inspection

Inspection is an interesting methodology for knowing the life of schools. It is based on different assumptions about what constitutes good information about schools and about how to collect and analyze that information legitimately. This section compares several key elements of traditional inspection with those of traditional accreditation. That the school visit is key to both increases the benefit to the PDS designers.

What is the first purpose of the exercise?

Traditional accreditation

The accreditation process determines whether a school meets the association's standards for a member school. The purpose of the accreditation team visit is to validate the school's judgment about where it stands on each standard. If the association judges that a school has met its standards, it will continue the school's accreditation (or grant accreditation). If not, it might place the school on probation with recommendations about how it can comply at a later time.

Traditional inspection

The formal purpose of inspection has been to raise school standards for teaching and learning. The purpose of the inspection team visit is to create a particular portrait of teaching and learning in a school. The inspection team will judge that quality and suggest what both the school and the policy makers should do to improve it.

How is information collected and how is sense made of it?

Traditional accreditation

Team members collect information at the school site during events that have been designed especially for the process: self-study, interviews, review of policy documents, examination of school files. Using this information, they conclude whether the school's self-study is valid and whether the standards have been met.

Traditional inspection

During the inspection week, the members of the inspection team collect many items of evidence and make judgments about the actual life of the school. They spend over 65 percent of their time in the classrooms while teachers are actually teaching. They examine

such issues as how effectively teachers engage students in discussion; how well students know appropriate basic core knowledge, such as multiplication tables; how teachers work with students on revising their writing; and how student differences are respected. Although the school completes documentation prior to the inspection visit, the inspection team members focus less on the self-study than on what they actually see. They conduct informal interviews and review documents at the school. They check out what they are learning from direct observation. Corporate conclusions about the quality of teaching and learning in that school during that week are the results of intense discussions among individual team members about the evidence that each has collected and about individual and group judgments based on that evidence. This team moderation process validates evidence and judgments and often results in a synthesis that is stronger than the original conclusions of the individual inspectors. Since moderation discussions take place concurrently with the inspection visit, they also inform the collection of information, for example, by filling obvious gaps in what the team knows and resolving differences among team members about the school.

How are judgments about value made?

Traditional accreditation

The purpose of accreditation is to draw objective conclusions about how well a school meets set standards. Events for data collection are designed especially for the team. The amount of time the team spends watching actual activities in the normal schedule of the school's life is limited. Objectivity is highly valued. In the interest of reaching an objective decision, a formal committee, whose members were not on the accreditation visiting team, decides whether the school will receive accreditation.

Traditional inspection

In sharp contrast, inspection analysis is based on, and is driven by, the judgment of the individual inspectors and the inspection team as a whole. To understand what is happening, inspectors try to be as close as possible to the actual life of the school, rather than distance themselves from it by relying on documents and hearsay evidence. Using standards in a complex and often idiosyncratic way, inspectors allow full use of their experience, wisdom and judgment. Inspection team members reach the final judgments about the quality of the school by consensus while they are at the school. The final inspection report is written by the inspection team leader and reviewed by inspection team members and higher officials in the inspectorate. The final and anonymous report is not a team report, but the report of the inspectorate as a whole.

How are standards used?

Traditional accreditation

The accreditation process is built on the standards set by the association. Accreditation standards are rather precise statements about matters judged to be important by the association, which represents the teaching profession and the education community. Standards are expected to be as clear as possible so that visiting teams will be able to apply them even-handedly to different institutions.

Traditional inspection

Standards in the first instance rest with each inspector as an independent professional. The lodestones of an inspector's standards are the ones that he or she has

formed over a long professional life as a teacher and a school inspector. Although codified government standards are also important, they do not necessarily dominate.

For example, a mathematics inspector will have had many years experience teaching mathematics and will have seen mathematics being taught in all kinds of schools across the nation. Her standard for good mathematics teaching and learning will be built on her well-tuned knowledge about the appropriate levels of knowledge for students at each grade and about what teaching approach works best with what kinds of students. She will know how her standards for mathematics performance relate to the official standards set by the national curriculum.

Inspection is meant to raise the actual standards that exist at a school rather than simply to validate that a school has met a code of standards. An inspector seeks to apply his standards thoughtfully to a particular school. The life and quality of the school and the intense conversations among the inspection team members shape that application. Constructing the actual standards that it uses is an integral part of an inspection team's portrait of a school. This process allows the team to understand and review directly the school's actual standards.

Inspection challenges the notion that the primary element of design is to set standards. Without comparing the value of one set of assumptions with that of another, this analysis shows the close interrelationship between standards and methodology. The most powerful explanation for why inspection standards differ in nature and style from accreditation standards is that inspection's method of knowing schools differs from accreditation's. Standards differ in ways that are directly related to what is assumed about how to gain good and useful information about schools. The challenge is for the NCATE working group to consider both standards *and* methods as part of its design task.

The tradition of inspection challenges the working group to move beyond seeking information that meets the requirements of objectivity in experimental evidence to considering the more basic question of what makes knowledge about schools legitimate and rigorous. For some purposes, information that meets these requirements is right. But for other purposes, it is inherently wrong. Inappropriate application of these requirements can actually harm the reputation of scientific objectivity.

5. How the Methods for Knowing Schools Are Linked to Setting Standards

Real benefits result from reconsidering the relationship between accreditation and the methods for knowing a school. The current accreditation process restricts the connections between support and monitoring. It is possible to design a legitimate and rigorous inquiry method that will garner legitimate knowledge and allow judgments about the actual life of a school that can both monitor and support its progress. The resulting knowledge is more cohesive, which makes it possible to combine monitoring with support. This would go a long way toward solving the dilemma of how to develop accreditation standards for PDSs.

Before changing the design of the accreditation team visit, we must first establish that the methodology for learning about a school is important to setting and monitoring school standards. Accrediting organizations usually believe that it is most important to set standards. How a visiting team learns about a school's performance

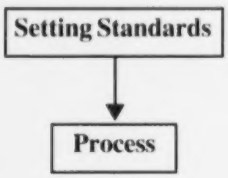
often is seen as a secondary, procedural, or administrative problem. If we assume that the best standards for schools in a democracy are explicit representations of the public will, then the nature and content of the standards should determine how they are measured. In fact, it works the other way. Since accreditation associations are beholden to explicit or implicit assumptions about what measurement methods must be used, standards are often set to meet the requirements of the methodology, not the conditions of the public will.

The following figures illustrate the impact of methods on standards-setting.

The basic elements

This first figure shows the most common way of thinking about how standards-setting relates to the accreditation process.

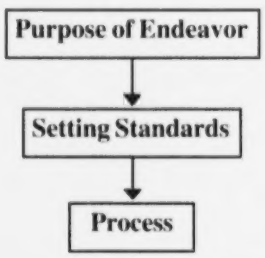
Figure 1. ***The basic elements***



Introducing purpose

As it becomes clearer that standards cannot stand alone, that they are shaped by how they are used, it also becomes clear that it is important to first establish the purpose of the endeavor. Little explicit attention is given to the element of process.

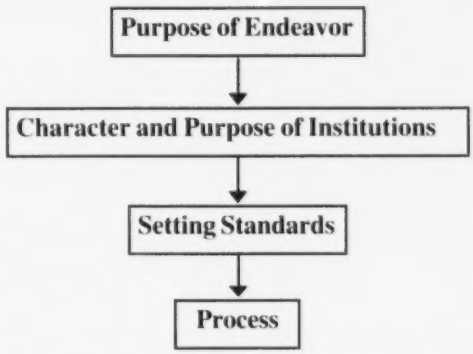
Figure 2. ***Introducing purpose***



Introducing relevance

It appears necessary to justify standards-setting to fit the target institutions or to make it relevant to them. This means identifying the characteristics of the institutions in the early stages of standards design. This approach is most like the one that the working group is using.

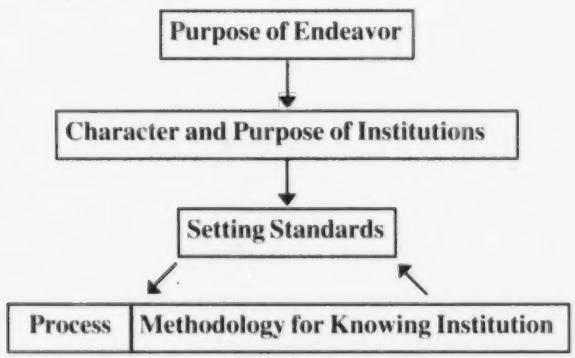
Figure 3. ***Introducing relevance***



Methodology intrudes

Elements have been added that explicate the process of setting standards. Although none of them interferes with either the direction of the arrows or the process of measuring against the standards, it is clear that the methodology for knowing an institution shapes the nature of the standards that are set. This is dramatically recognized in the common admonition, "Set standards you can measure." Thus, a hidden influence lurks in the process of using standards that affects the process of setting them. That influence is the methodology that is used to know the institution.

Figure 4. ***Methodology intrudes***

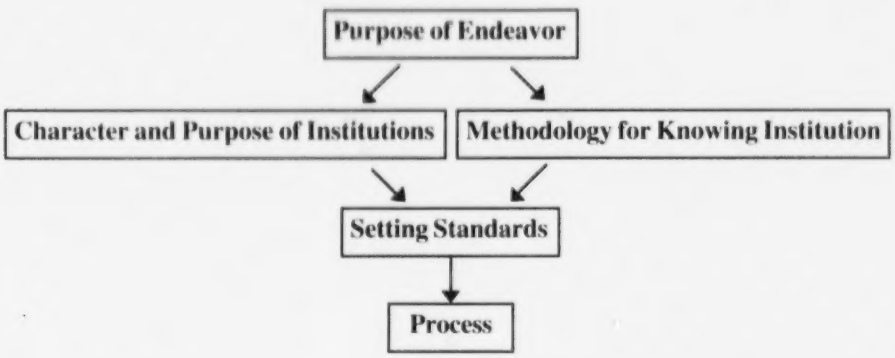


143

Putting methodology in its proper place

Methodology is in its proper place when it is an explicit part of the design process. This acknowledges the strong link between standards and the method for knowing the institution.

Figure 5. ***Putting methodology in its proper place***



The relationship between methods and the total design process greatly increases the importance of what methodology is used. What set of methods will yield the best information about the actual performance and life of a school? What determines the legitimacy of information? The new purpose of the design—an accreditation process that supports improvement—can now shape the design and not be held captive by an inappropriate methodology.

6. The School Visit as a Method for Knowing Schools

English inspection demonstrates that it is possible not only to create a different way to know schools, but that it is possible also to create a different way that is legitimate. One can see that it is possible to build a methodology for an American school visit that focuses much more closely on what is actually happening in that school and that focuses on the particular teaching and learning there.

This direct focus on teaching and learning could replace the focus in current education evaluation on indirect artifacts of teaching and learning (e.g., standardized tests, surveys of teacher perceptions), which were created primarily to meet the methodological demands of the inquiry. Most educators and the public in general believe that the knowledge about schools that matters most is knowledge that improves schooling. A direct focus on teaching and learning would build that kind of knowledge. In the discussion about how we know and judge schools, the emphasis would shift from focusing on problems of methodology to focusing on problems in

schools. Much of the current obsession with method results from trying to understand how the artifact used for teaching and learning represents the real thing. For example, does a student's test score on the SAT represent what she really knows, what she is capable of doing, what a school has taught her?

This shift in how we know and judge schools makes it possible to see how one method of inquiry can serve the functions of both support and monitoring. Greater, more legitimate knowledge about what matters most in the school would serve both functions.[5]

The following points define and strengthen such a methodology:

- The purpose of the methodology is to generate information for the purpose of improving schools.
- The results of the inquiry should be constructed and presented to inform both support and monitoring functions. First, the results should directly benefit the school. They should inform the policy and procedures of appropriate governmental agencies and other school monitoring groups, such as accrediting associations and parent groups. The purpose behind the information for monitoring agencies is not basically different from that of the school itself: to improve teaching and learning. The different political and organizational positions of the different groups will shape different perspectives about the information and what is effective action. Nevertheless, if the nature and quality of the information about schools serves both monitoring and support functions, it will support cohesion rather than division in the national efforts to improve our schools.
- The information garnered from an accreditation team's visit is probably best expressed as conclusions about the quality of a particular school's daily practice of teaching and learning. These conclusions must be based on, and supported by, specific evidence from the life of the school.
- The team must come to terms with the varying perspectives within a school about what happens and why it happens and must seek to meld these into a cohesive portrait. The team's outside perspective makes it possible to bring together the perspectives within a school. (That both the team and the perspective it brings are temporary in the life of the school may contribute to the value of the team's perspective for the school.)
- A visiting team's recommendations are not findings about ideological constructs of schooling; they do not prove or disprove the efficacy of a particular strategy or reform. They are conclusions about what actions that particular school and its stakeholders can take to improve the actual life that goes on there.

The school visit is a powerful tool in this direction. By combining support and enlarging monitoring, accreditation associations can make the accreditation visit a much more useful tool. This reconstruction would solve the working group's problem of setting standards for PDSs.

The visit allows direct observation and consideration of what matters most: the interaction between teachers and students in the classroom. It allows an on-site analysis of the effects of crucial institutional features on the nature and quality of the teaching and learning the school provides, such as principal leadership, adequate

financial support, faculty collegiality, and student motivation. It provides an approach to veracity that is based on common sense: "I saw it myself." It allows conclusions to be built that are directed toward improving what is happening, rather than general conclusions that are based on constructs that serve as artifacts, such as school demographic factors or variables of an experimental treatment.

The following points for redesigning the accreditation visit follow from this approach:

- Focus the team's time and attention on actual teaching and learning.
- Rely on professional judgment and team discussion (moderation) to identify evidence, to reach conclusions, and to make recommendations.
- Define evidence as discrete pieces of information that the team discovers during the school visit. It is impossible to specify the evidence before the visit. The evidence is focused by the developing generalizations that the team members make about the quality of a school, not by preset indicators for what the team members should observe.
- Draw conclusions and make recommendations on the basis of the team's consideration of what it has actually seen and heard at each school. How the school presents itself on paper, how well it does against preset benchmarks, how high the student test scores are, how well done the students portfolios are, how the school's curriculum is aligned to national standards, or how much teachers use best practice—all serve as grist, but not as the defining parameter. The team's task is not so much to validate what the school has prepared or what external indices say about the school, but to come to an independent conclusion about what is happening at a school on the basis of the real life that the team has had the privilege to observe and consider. Although a team's judgment may indeed validate previous conclusions about the school, its purpose is to improve the quality of that school's performance. That is the purpose of the team's report.
- Design the team's report to consider how well the school is performing and how it could do better. The ideal report provides a cohesive picture of the school's actual performance that not only supports conclusions about quality but also supports recommendations for improvement. Recommendations should not be limited to the school but should include all groups and agencies that affect what happens in the classrooms of the school.
- Orient the school and prepare the team for the visit with care. The school visit is at heart a collaborative exercise that requires thoughtful preparation by both the visitors and the visited. This approach to knowing a school does not seek to become either team- or school-proof.

If the accreditation visit changed in these ways, accreditation would shift from being an exercise of regulation to becoming an exercise of inquiry. That shift not only would make the accreditation team visit a credible means for supporting the PDS but also would strengthen the monitoring function of NCATE. Working with better information about what is actually happening in PDSs, (or for that matter in other teacher training institutions), NCATE would be in a much more influential position to shape

policy and make decisions about intervention for teacher education. NCATE's methodology would gain credence because it would be shaped to compel schools toward excellence rather than to require them simply to comply with NCATE standards.

7. New Possibilities for Setting Standards

In this fast changing world, the definition and function of standards are not as stable as they once were. Those setting accreditation standards face the challenge that has been brought about by the new standards movement. Many more sets of standards for schools and for school performance now exist, some set by districts, some by states. PDSs require standards of a different order.

A new and potentially powerful role for NCATE, and other accreditation associations as well, would be to become for each of its member institutions the chief articulator of the diverse sets of standards that apply to that institution. This articulation should be reciprocal. While pulling together the sets of public and professional standards that apply to each of its member schools, NCATE would advise public and professional standards-setting agencies about what makes standards-setting effective.

There is a large gap between the codes of standards set by accrediting associations, professional groups, citizens' task forces, or independent reform projects and the actual standards that shape practice in a school or program. It is already clear that school practice does not improve simply because a citizens' group or a professional association has constructed a new set of "world-class standards." The actual practice in a school is determined by the actual standards and expectations about teaching and learning held by that school's faculty and staff. It is these actual school-based standards that must be raised.

An approach to accountability that seriously considers the actual school-based practice of teaching and learning and focuses on improving that practice provides Americans with some hope that standards can have the same power to improve schools as they have in human affairs and thought. As nongovernment associations that know schools from the inside, NCATE and the other accrediting associations can play a major role in realizing that possibility. The school visit is the key.

8. Final Observations About the Working Group

In addition to considering drafts of proposed PDS standards, the working group is considering different designs for the accreditation team visit. The impact of the meeting room discussion can be seen in the following:

- The current draft of PDS standards begins with three design principles: relevance, balance, and alignment. Although this does not break completely with the idea that setting standards is the place to begin, it suggests that the working group sees standards as tools that should be shaped to meet specified functions.
- The working group draft proposes two kinds of standards for a PDS: (1) threshold conditions that an institution must meet to be considered a PDS and (2) standards for quality review. Although this solution recognizes the usual separation between monitoring and support, it attempts to include support as a legitimate function of the process.

- The three standards in the quality review category are (1) learning; (2) accountability and quality assurance; and (3) culture, roles, and structures of the PDSs. This break with the tendency to build long lists of standards provides a new emphasis on learning. It probably places too much emphasis on accountability as an essential institutional function and not enough on teaching.
- The quality review standards would be assessed during a team visit that is different from the traditional accreditation school visit. The working group hopes that a new visit protocol will be developed and tested in the next two to three years.

It will be interesting to note if the final product pushes these ideas further.

In Conclusion

I hope that the working group will help accreditation evolve from being a bureaucratic process to becoming a powerful method of practical inquiry into what actually happens in schools. This would help schools, monitoring agencies, and the public to know better how to ensure that our schools will continually improve. Reform initiatives will become irrelevant because schools will have to stay in tune with the public goal of seeking excellence. The nation's energy will shift from building experimental reform initiatives that are meant to fix schools to working with schools on a daily basis.

I hope that the working group's struggle to set standards for a developing institution becomes part of the answer to the explicit challenge that school accreditation faces in this era of standards reform. Part of that challenge is to meet the public purpose of accountability: to make schools better. If the accreditation associations are successful in realizing their potential, they will strengthen their role and continue to warrant the public's trust in their legitimacy.

The key question is whether an accreditation process can be conceived as a knowledge and information system rather than as an administrative process. When accreditation is considered a methodology for knowing and judging schools, it will be possible to see how it can play both support and monitoring roles. If the accreditation process becomes an exercise of inquiry into the actual practice of an institution, it can support better decisions about quality, better judgments about how well an institution meets applicable standards, and better insights and action that will help a school raise its actual standards.

Notes

[1] I owe a great deal to many for their support of my work on this paper. Marsha Levine and Leslie Oh are the people whose support invokes special acknowledgment.

[2] Rhode Island Department of Education—the design of a statewide, comprehensive system of school accountability; New England Association of Schools and Colleges—review of the accreditation process for public secondary schools; Committee to Improve Education in South Shore (Chicago)—authentic community-based accountability; Illinois State Board of Education—quality review; and the Annenberg Institute for School Reform—forum on school accountability.

[3] Illinois became the most developed American example of quality review in the latter part of 1996.

[4] Although inspection has greatly increased in use in English education, major changes were made in the 150-year-old methodology in 1992.

[5] See Green (1995). David Green's work in Illinois has been one important source for some of this analysis.

References

The Malcolm Baldrige National Quality Award. (1995). *Education pilot criteria 1995.* Gaithersburg, MD: National Institute of Standards and Technology.

Freeman, D. (1996) *"From here": A synthesis of the Chicago discussions on PDS standards.* Washington, DC: NCATE.

Gardner, W. E., Scannell, D., et al. (1996, May). The curious case of NCATE redesign. *Phi Delta Kappan*, 622-629.

Green, D. (1995). *Crafting a system: Accountability and quality assurance in Illinois schools: A report to the Illinois State Superintendent of Education.*

Hall, G. (1993). Field reviews accreditation standards. *Quality Teaching, 3* (1), 1-3.

Holmes Group. (1990). *Tomorrow's schools: Principles for the design of professional development schools.* East Lansing, MI: Author.

Houston, H. (1992). Institutional standard setting in professional practice schools: Initial considerations. In M. Levine (Ed.).*Professional practice schools: Linking teacher education and school reform* (pp. 124-132) Washington, DC: T.C. Press.

Interstate New Teacher Assessment and Support Consortium (INTASC). (1992). *Model standards for beginning teacher licensing and development: A resource for state dialogue.* Washington, DC: Author.

Murray, F. B. (1993). "All or none"— Criteria for professional development schools." *Educational Policy, 7* (1), 61-73.

National Council for Accreditation of Teacher Education (NCATE). (1990). *NCATE standards, procedures, and policies for the accreditation of professional education units.* Washington, DC: Author.

National Council for Accreditation of Teacher Education (NCATE). (1995a). *Professional development schools standards project.* Washington, DC: Author

National Council for Accreditation of Teacher Education (NCATE). (1995b). *NCATE standards: Standards, procedures, and policies for the accreditation of professional units (1995).* Washington, DC: 1-19.

NCREST. (1993). *Vision statement: Purposes, commitments and enabling conditions for professional development schools.* New York: Professional Development Schools Network.

Sykes, G. (1997). Worthy of the name: Standards for the professional development school. In M. Levine & R. Trachtman (Eds.), *Building professional practice schools: Politics, practice and policy* (pp. 159-181). New York: Teachers College Press.

Teitel, L. (1996). *Professional development schools: A literature review.* Washington, DC: NCATE.

Trachtman, R. (1996). *NCATE PDS standards project: Preliminary findings.* Washington, DC: NCATE.

Wilson, T. A. (1996a). *Reaching for a better standard: English school inspection and the dilemma of accountability for American public schools.* New York: Teachers College Press.

Wilson, T. A. (1996b,January 17). On knowing the secret of schools: Lessons from the British on judging schools with their complexities in mind. *Education Week*, 44.

Wise, A. E. (1995). NCATE's emphasis on performance. *Quality Teaching, 4* (3), 3-7.

Finance and Policy Structures

That Support the Sustenance of Professional Development Schools

Jon Snyder

This paper presents exemplars of the practices fused in four professional development school (PDS) communities with an emphasis on those related to finance and policy issues. The paper concludes with a discussion of similiarities across these communities with respect to how they use finance and policy structures to sustain professional development schools.

The assumption underlying the research presented in this paper is that something can be learned from studying established and sustained professional development schools. The goal was to understand how they use money and policies to influence changes in institutional rules, roles, and relationships to realize the potential of professional development schools. We sought to document how sustained PDS communities support, and pay for, the work—not the nature of the work or how much the work costs. How, in short, do educational communities who are "doing PDS" make it work?

Methodology

The baseline criterion for site selection was evidence that a site could, over time, document some progress in the four core functions of a PDS as identified by the NCATE Standards Project: the preparation of new teachers, the continuing development of experienced teachers, student learning, and research directed at the improvement of practice. A second criterion was the creative use of existing resources. That is, could we learn something from these sites that would address the research questions? Finally, given the unlikelihood of long-term large sums of additional financial support (Odden, 1994; Monk & Brent, 1996), we looked for sites that reallocated, realigned, and blended existing sources of funding rather than those that depended primarily on external funds for ongoing support of core PDS functions. We also sought to balance geographical location, demographics of the programs and the communities in which they were embedded (e.g., urban, suburban, rural), and the types of university sponsors (e.g., research university/state college, undergraduate/graduate program, public/private, etc.).

We initially identified possible sites with a review of the literature and the use of the NCATE PDS Standards Project surveys. The standards project sent out questionnaires to a broad array of educators, requesting nominations of exemplary professional development schools based on their four criteria/functions. After summarizing these questionnaires, the project selected 28 sites to complete a survey about their PDS policies and practices. We used those completed surveys to narrow the field to twelve sites that met our further criteria. We then telephone interviewed representatives from NCATE, AACTE, the

NCREST PDS Network, and the National Network for Educational Renewal, asking the basic question, "What are these sites doing of interest in the area of finance and policy supports for professional development schools?" This reputational sampling of representatives from networks knowledgeable about, and supportive of, the professional development schools narrowed the list to seven sites. Four sites agreed to participate—the University of Connecticut, Montclair State University, the University of Cincinnati, and the University of Louisville.

The selection process allows us to state that these sites are making long-term progress toward fulfilling the four functions for PDSs identified by NCATE. It also suggests that the sites have something to teach the field regarding how to pay for and support professional development schools. It does not, however, allow any claims that these are either the best or the only educational communities that could do so.

Following the sites' identification and agreement to participate, the author made telephone contact, asking three broad questions:

- What are you doing?
- How do you pay for it?
- What supports your efforts?

That conversation ended with a request for any and all written documentation that addressed these questions (program documents, research articles, accreditation reviews, etc.). A review of the provided documentation generated cross-site hypotheses as well as context-specific questions seeking clarification and exemplars of how the sites actually pay for and support their PDS efforts. Site visits were made, with further information provided through telephone calls, e-mail, and additional documents. Site visits consisted of interviews with both university- and school-based educators as well as with teacher education students.

Following construct and discrepancy analysis, the exemplars of the possible and themes were drafted. The final piece of data collection and analysis consisted of presenting the exemplars and the cross-exemplar themes to representatives from the sites and to PDS network representatives.

Exemplars of the Possible

Our initial hypothesis was that to support and sustain PDSs, sites would have created new funding and policy strategies aligning personnel and structure with new conceptions of learning, teaching, and learning to teach. We thought that we would find educational communities building new funding and policy structures that matched emerging agreements regarding the "constructivist" nature of learning; teaching as a developmental, lifelong process; and the organizational change requirements of institutions sharing the responsibility for the education of children and the adults who work with them.

Although the issue of alignment proved appropriate, the notion of funding and policies proved limiting. Instead, the sites did their work more broadly—aligning key sets of resources to match these new conceptions of learning, teaching, and shared responsibility. The visited sites collapsed the distinction between "people" and "money/policy." They enacted, simultaneously, two realizations: (1) groups of

professional educators do the work by establishing conversations and relationships, and (2) ultimately the professional educators can neither "do" nor sustain the work without financial and structural supports. The visited sites did not begin with identifying the "right" people and expecting them to magically transform the world. Nor did they begin with establishing structures and realigning funding streams and expect the people to magically transform themselves. The structures and funding streams grew from, and grew, the professional educators who did the work. The professional educators grew, and grew from, the structural and funding changes.

We learned the following:

- School-university partnerships attempting to restructure simultaneously the lifelong education of educators and the education of children depend on three sets of resources—school-based educators, college-based educators, and prospective educators (viewing prospective educators as significant resources is essential to sustaining the learning environment for all participants).
- Clustering those resources in numbers (i.e., groups of prospective educators at a school site) and in time (i.e., full-year field experiences for prospective educators and university-based educators who then "spend" the year, and more time within the year, at that site) increases teacher learning and improves the conditions for teacher learning.
- Clustering works only when structures and processes are in place that support those professional educators (i.e., ongoing support and learning opportunities for school and university students as well as for school- and university-based educators).

Successful structures and processes share certain key characteristics:

- public processes/criteria for clustering;
- time to develop and sustain the conversations and relationships necessary for learning;
- institutional recognition of fundamental responsibility for the education of children and the ongoing education of the adults who work with children;
- leadership within the institutions that was present "at the creation" as well as the more spontaneous leadership that takes advantage of emerging opportunity; and
- a broad notion of partnership that included significant district, union, and university participation early in the development process (school-department collaborations or teacher-university professor collaborations in the visited sites did not sustain themselves without larger structural and community support).

Following a brief overview of the program, the following exemplars are organized around the supports (financial and policy) used by the sites to enhance the ability of the three key sets of professional educators to enact the ideal of professional development schools. Clearly these are not comprehensive descriptions of these contexts. The exemplars present only selected highlights of the educational

communities within the already selected focus area of finance and policy. Many of the supports highlighted in one site are also found in other sites.

In addition, the professional educator categories are inseparable in the visited sites. Because of the shared responsibility for complementary goals, the sites have built an environment of positive interdependence whereby whatever supports any one group supports the other two groups. For instance, something that supports school-based educators to create a better learning environment for their students supports the development of prospective educators learning there and supports the ability of university-based educators to support the learning of their students as well as their own learning.

Finally, the "clusters" themselves are a cross-group support, a truth that might be lost if they are described separately. Thus, the clustering itself supports all three sets of human resources. The traditional isolation and the value of cohort groups apply as much to university faculty as to pre- and in-service teachers. One University of Connecticut professor commented, "As a special educator I'd been isolated for so long. I've found a whole bunch of colleagues with whom I can work."

University of Connecticut

Nestled within the wind-swept hills of northeastern Connecticut, the University of Connecticut is the state's major public research university. Following nearly four years of planning, constituent building, and pilot work, the university fully implemented an entirely new teacher education program in 1991. In the process it reshaped the entire School of Education as well as the nature of the relationship between school- and university-based educators. The sweeping changes allowed no element of the educational program to stay untouched: "The faculty and administration, together with other constituencies served by the teacher education program literally began from scratch....The existing teacher education curriculum was, in effect, completely scrapped" (Norlander, Case, Reagan, Campbell, & Strauch, 1996, p. 40).

Program Description

The University of Connecticut is a fair-sized university (24,000 students on the Storrs campus), and its redesigned teacher education program (subsuming into one integrated program the traditionally discrete elementary, secondary, and special education programs) admits approximately 125 students each year as juniors. These students have completed two years of primarily discipline-based content work guided by a blending of state requirements for teachers, general university requirements, and requirements of a content area undergraduate major. They then spend three years in the School of Education in an integrated bachelor's/master's degree program (IB/M). A small number of students enter the program with undergraduate degrees. After an intensive summer of course work and fieldwork, these students join the undergraduate cohort during their senior years.

IB/M organizes the three years in four interwoven strands: core, clinic, seminar, and subject-specific pedagogy. Core focuses on the educational content that the School of Education has determined essential for all teacher preparation students. Clinic, the carefully designed and sequenced set of field experiences in which all students participate, requires work in multiple settings, including a mandatory urban experience and time with students with disabilities. Seminar supports the students'

abilities to link core material with clinic experiences and promotes reflectivity. Finally, subject-specific pedagogy courses give students the necessary specialized preparation for their individual certification areas.

During the junior year, students take core courses aligned with field experiences (clinic) and the linking seminar. During the first semester of their senior year, this mix continues with the addition of subject-specific pedagogy courses. In the second semester of their senior year, students engage in full-time student teaching accompanied by seminar and one subject-specific pedagogy course. Following the successful completion of these experiences, students receive their undergraduate degree. The master's year consists of a research project, an internship project, courses to enhance the student's research and internship projects, and electives to support the individual student's area of interest, for a total of 30 semester units. The internship project is a school/district defined student-selected change project requiring a minimum of twenty hours a week in the school for the entire academic year. Usually, the research project grows out of, and builds on, the internship experience. Thus, the goal of the master's year is not just learning more about "how to be a competent classroom teacher." Instead, the goal is building the knowledge, skills, and dispositions required of professional educators with essential leadership roles as innovators and change agents in their schools, districts, and communities. The internship year is still school-based; it still involves working with students. It embraces and expands, however, a definition of teaching beyond "delivering instruction" in isolated classrooms.

Central to the work of the program are the professional development centers (PDCs). "These centers for professional development are not simply schools in which student teaching takes place: they are places in which colleagues from the schools and the university, with their respective students, come together for the purposes of preparing future teachers and renewing the teaching profession (including university teaching)" (Norlander, et al., 1996). Three general principles guide the design and implementation of the PDCs. First, virtually all field experiences for IB/M students occur in a PDC school. This is one instantiation of "clustering," and the numbers become remarkable quite quickly. During the 1995-96 academic year, for instance, 135 students spent a total of 43,416 hours in Windham PDCs and 130 students spent a total of 47,088 hours in Hartford PDCs. The second principle is that university personnel, school district personnel, and IB/M students share the responsibility for creating a positive and challenging environment for learning (for school-age students, university students, and school- and university-based educators) in their PDC school. Finally, a primary emphasis within the PDCs is on development projects and research activities. Perhaps the best exemplar of this principle is the internship project mentioned above and detailed below.

Support for University-Based Educators

Early in the process, the University of Connecticut realized "that if significant changes were to occur in our program then it was necessary to change how both the faculty and the students used their time." One key program redesign that changed how faculty used their time was the breaking up of traditional three-unit courses into core foundational elements needed by professional educators. The program now intersperses one-unit core courses throughout the junior and senior years. This means, according to the assistant dean, that "one's role is defined by what one is good at."

To change how faculty used time also required rethinking (a) what counts as "work" and (b) what counts as productivity when the time comes for promotion and tenure decisions. One example of the redefinition of time is the following weekly schedule of a recently tenured faculty member serving as a PDC coordinator:

- Monday—professorial duties (e.g., meetings, writing, grading papers, advising students),
- Tuesday—8:00-9:30, core seminar at PDC; 11:30-4:00, courses on campus,
- Wednesday—professorial duties,
- Thursday—7:30-4:30, PDC coordinator at PDC site,
- Friday—9:00-11:30, internship seminar at PDC site; afternoon, professorial duties.

In addition, part of her "professorial duties" include such PDC-related work as the monthly PDC coordinators' meetings facilitated by the dean, which serve as another source of support. Something that makes such a schedule possible is recognizing school-university collaborative efforts as part of the core workload of a university professor. In the foregoing schedule, PDC coordination constitutes 20 percent of the professor's official workload. Meanwhile, supervising six student teachers also constitutes one course toward her workload. When her internship course and her research within the context of the PDC are taken into account, she can construct a livable and sustainable career. As she says, "Everybody has multiple roles—it can't work otherwise because the school people do not see you enough."

This kind of work also has to count in promotion and tenure decisions. The multiple roles, instead of fragmenting university faculty, actually serve to integrate professional lives. The conceptual integration of one's academic responsibilities (teaching, scholarship, and service) within the context of a PDC provides professors a manageable environment in which to meet even the most traditional promotion and tenure requirements. The professor with the schedule noted above argued vehemently, "This has tied and focused the three roles of the professor together and is a way to do a lot under the same rubric. I have earned tenure and promotion in this system but only because my scholarship and my teaching and my service are all grounded in the PDC."

University-level administrators claimed that acting effectively as a PDC coordinator receives positive responses in the School of Education and campus-wide in terms of career advancement. In support of such claims, new hires are getting tenured and promoted. In fact, not a single new hire has been lost to the system. Of course, hiring decisions play a role as well. As one faculty member commented, "Anybody we hire has to be able to work in schools."

Both the university and the School of Education acted on their belief that a fundamental responsibility of the university and the school is the preparation and support of professional educators. Thus, as the School of Education redesigned the program, it took advantage of a new set of general university requirements. At the School of Education level, the commitment to professional preparation played out in two ways. First, all the departments within the School of Education had to support the work or there would be no program. Two indicators of this support are (a) that 80 percent of the faculty have direct responsibility in teacher education and (b) that some teaching loads went up when teacher education became a School of Education responsibility. The second school-level commitment was in financing the invisible supports

required by the multiple requirements (state credentialing, general university, and School of Education/professional) and multiple contexts (School of Education, colleges of content areas, and K-12 schools) faced by prospective educators. For instance, the university has a non-faculty member perform credential advising and a non-faculty member coordinate placements. Of the latter, one faculty member noted, "That role is absolutely essential. She deals with the district facilitators, and it cuts down on the PDC coordinator's problems. And students feel free to talk with her and supported by her."

Support for School-Based Educators

School-based educators benefit from a number of supports. As part of the PDC agreement, each PDC has a district facilitator. Some districts pay for the facilitator from their core operating budget. Also, some participating districts give professional development credit for working with interns.

The university also offers support for school-based educators. Many PDC coordinators do their research in and with the PDC sites, providing learning opportunities for K-12 educators, university educators, and university doctoral students. The university also presents workshops and seminars as part of its partnership contract with districts. One day of such workshops is given for every four full-time intern placements. In addition, the program combines its faculty and student resources to support student learning in PDC schools. For instance, the program co-sponsors a five-week integrated program for students who are at-risk, have special needs, or both. This summer school gives K-6 educators an opportunity to work together with graduate students and colleagues from the University of Connecticut and Eastern Connecticut State University in classrooms where students represent the diversity of the state. This serves as but one example of the positive interdependence whereby the enhanced learning of K-12 students supports the learning of school-based educators. In turn, the enhanced work of school-based educators supports the growth and development of prospective educators learning their profession in those school-based sites with those professionals.

Although the support provided by the district- and university-based educator is appreciated, the prospective educators are the prize supports. One person put it this way: "We want the fifth-year students. They are the payoff." Certainly the caliber of the students is important, but two program-design structures ensure that these capable people are supporting the work of school-based educators. One such structure is the inquiry project required of master's students. Because so much of the research work of the School of Education takes place in the context of schools with the function of providing meaningful support for teachers, it is not surprising that much of the master's students' work is the same.

The second program-design factor is the internship project. The internship project is a school/district-defined student-selected change project requiring a minimum of twenty hours a week in the school for the entire academic year. Briefly, the process begins when school- and district-based educators, with and through the PDC coordinator, create possible intern projects that would meet their most pressing needs and goals. The PDC coordinator helps shape the proposals to make them marketable to the potential interns and to prospective faculty advisors (e.g., aligned with their ongoing research interests). In the spring of their senior years, students choose from among the proposals. Starting when they meet with the school person with oversight

responsibility for the project, interns embark on a year-long effort to support the work of school-based educators. The internships are, apart from their educational function for the interns, a "school service" project in which the interns learn and practice such professional leadership roles as—

- designing and developing innovative curricula, programs, or both;
- working collaboratively with teachers and administrators; and
- working with children or adolescents outside the context of a self-contained classroom.

In addition, the internships often become the context for the inquiry projects. That is, the PDCs become the context for teaching, research, and service for the interns just as they do for the university- and school-based educators. Recently completed intern projects have included a future teachers club; a writing-math technology project; a language/writing enrichment project; a geography lab; portfolio assessment; an alignment of math, science, and language arts curriculum; a reading incentive program; an educational mentor program; family literacy; a study skills program; and an integrated reading and writing curriculum for high school students.

Supports for Prospective Educators

The program itself provides the strongest support for these students. For instance, clustering students over the three-year program allows the more experienced students to support the less experienced students. One senior remarked, "The interns really do mentor the juniors and seniors." The caliber of that mentoring and support is perhaps most clearly evidenced by the successful assumption of educational leadership roles in the internships.

Another key element is that the students are "good" to start with. One program founder joked, "Were these student teachers not as good as they are, somebody who had our job would be recasting the program today." Beyond strong content-area preparation, admissions requirements include experience working with children, three letters of recommendation, and a rigorous interview process. "The students are what this program is all about so admissions is the key."

Once formally admitted before their junior year, students are further supported as traditional disciplinary content knowledge is linked with professional preparation. One key element is what the department chair calls "the James Michael Curly model of field work—early and often." The students recognize that "one of the real strengths we bring with us is the three years of classroom experience."

One reason the classroom experience of the students is so supportive is the assumption of responsibility by school-based educators, and by their schools and districts, for the education of educators. It is not just the classroom placement that the students receive, but access to all that supports student learning within the school, including technology, curriculum materials, and all the educators on the site.

Montclair State University

Montclair State University is an undergraduate school with its roots in the New Jersey state university system. Immediately surrounded by suburban homes, the

university takes seriously its relationships with, and responsibility to, large neighboring urban settings with their concomitant challenges and potential. Montclair State has long been closely associated with the promotion of critical thinking in the schools. In 1987 the Institute for Critical Thinking was established on campus, and teaching for critical thinking became the theme of the university's teacher education program. The need to elaborate this concept in the clinical components of the program was the immediate impetus for the establishment of the New Jersey Network for Educational Renewal (NJNER). Through this emphasis on critical thinking, the NJNER strives to provide the best possible education for all students, enabling them to make good judgments and to become contributing citizens in a social and political democracy.

A district's entry into the network requires a two-year commitment, a yearly $2,000 fee, and a willingness to share information and resources. The daily operation of network activities is overseen by a director. This college-funded university faculty member reports to a policy-making committee with representatives from each participating district and the university.

Program Description

In published documents, the goals of Montclair's work in preservice teacher education as well as its broader work with the New Jersey Network for Educational Renewal are tightly consistent with the visions and goals of the National Network for Educational Renewal. When the dean of the school for eighteen years talks about these goals, the program comes alive:

> We need teachers who provide access to knowledge. Not transmission of knowledge but from a point of view of critical thinking—teachers who examine their respective disciplines through critical thinking and who know how to make good judgments using critical thinking. We need teachers with an ethical core so it is more than access to knowledge, it is access to knowledge in an urban setting. It is access to knowledge as access to power—political power, social power, and economic power. We need teachers who accept their change agent function—who accept the obligation **not** to be quiet; who make sure schools accept the responsibility to socialize kids into citizens in a democratic society. We need teachers who know and use pedagogy that provides access to knowledge, who can connect culture to knowledge. And we can only develop the kinds of teachers we need within a program committed to the simultaneous renewal of the preparation of professionals and of the professions in which they will serve.

The preservice program at Montclair State contains the following core features:

- preparation of interns in a setting that provides the kinds of conditions for active learning that they will be expected to establish in their own class rooms;
- placement of interns with a community of mentors rather than with a single mentor teacher (e.g., rather than use an apprenticeship system, the PDS faculty takes collective responsibility for beginning teachers);
- placement of interns in a cohort (five or more) at the PDS as junior faculty (e.g., as beginning teachers who are encouraged to fully participate in the

PDS community without undue concern for being "good guests");
- provision of instruction for interns at the PDS and opportunities to participate in professional development activities;
- supervision provided by both school and university faculty; and
- daily scheduled time for reflection on mutual experiences.

Central to this program design are the PDS/partner schools established through the New Jersey Network for Educational Renewal. The title professional development school is not granted until a school fulfills the four functional criteria of the NCATE standards. Schools in the process of meeting those criteria are called partner schools. School-based educators in PDSs and partner schools sit on university committees to evaluate the teacher education program and on the operations committee of the NJNER.

Montclair's most recent advance toward meeting goals is the Center of Pedagogy. Here the education of educators is conceptualized, planned for, and carried out with the involvement of the three groups who must participate in the ongoing program: university faculty and administrators in education, university faculty and administrators in the arts and sciences, and public school faculty and administrators. These collaborative activities reculture the institutions that house those groups as well as renew the individuals involved. At Montclair State, the Center of Pedagogy is the administrative base for those three groups where, without sacrificing their current affiliations, individuals can collaborate in an environment of parity.

As with their professional development schools, the NJNER had a choice either to establish a center with the name or to put the pieces into place and then establish the center. They chose the latter, arguing that it is more important to do the work than to have the name. The establishment of an operational Center of Pedagogy recognizes the level of shared commitment and mutual responsibility for the work done by the faculty in education, the arts and sciences, and the schools. The center has reduced the ownership issues that typically surround new educational practices and new educational roles and has supported progress toward the simultaneous renewal of the schools, the university, and the education of educators.

Supports for University-Based Educators

This exemplar highlights only two of the many institutional structures that support university-based educators who work closely with school-based educators in the interlinking structures of Professional Development Schools, the NJNER, and the Center of Pedagogy. The first structure is the financial support of the NJNER and the Center of Pedagogy from base university funds. Time is a key scarce resource in all cross-institutional collaborations. Sometimes "invisible" supports allow time for building the conversations and relationships necessary for successful collaboration. The NJNER and the Center of Pedagogy are two structures that make space for the time and processes for those conversations and relationships. Montclair State University pays for the director of the NJNER and the coordinator of the Center of Pedagogy with faculty line positions. Some of the "visible" work of these two faculty members is described in the following section, but the "invisible" work includes scheduling, getting rooms, communicating with multiple groups with multiple schedules, arranging for food and drink, and coordinating 330 clinical faculty. Faculty member after faculty member praised the value of their efforts—and the role of the institution in making it possible. "It only works," I heard often, "because we use institutional funds."

They received institutional funds ($60,000 and $75,000) because the central administration embraced teacher education. In both cases the sums were initially matching funds for grants, but when the grants went away, MSU continued the investment. The dean went to the president of the university and said, "If you want to keep us at the cutting edge we will need this money." He outlined exactly what would be spent on what with what desired outcomes. The desired outcomes—aligned with Goodlad's agenda (1990) (Goodlad, not coincidentally, recently received an honorary degree from MSU)—mapped neatly onto university goals. The point worthy of reiteration is that Montclair State University conceives of the education of educators as central to its *university* mission. Committing institutional money constitutes one indicator of enacting that conception.

The second support is the Faculty Scholarship Incentive Program (FSIP). Several years ago the university (not just the College of Education) decided that "to remain committed to excellence, it is important that faculty be provided greater flexibility in the conceptualization and pursuit of their creative and scholarly goals." To provide this flexibility, the university offers an optional program that allows faculty greater latitude in shaping their careers within the parameters of the mission and goals of the university and the respective colleges, schools, and departments. In effect, the FSIP allows a faculty member to choose from various criteria for promotion and tenure.

University documents succinctly state the basic process:

> Each academic year, an eligible faculty member may opt either to teach a 24 teaching credit hour load [8 courses] or submit a proposal for a scholarship project for up to six credits of on-load time. The proposal and project shall relate to one of the following three areas of scholarship: (a) scholarship of pedagogy, (b) scholarship of discovery, integration or aesthetic creation, (c) scholarship of application.

If accepted, an individual normally has two years to complete the project. In addition, the individual must show evidence of the scholarship produced by the project and its communication to a wider academic community (e.g., publications, reports, colloquia, conference presentations). The basic premise of the reward structure still focuses on teaching (never going below 30 percent of the criteria) but then provides opportunities for choice among the three kinds of scholarship.

The official document also defines the types of scholarship. Scholarship of pedagogy involves the *examination of teaching* (e.g., designing and leading faculty development workshops; coordinating mentoring activities; engaging in personal examination of teaching, programmatic revision, etc.). Scholarship of discovery, integration, or aesthetic creation consists of *engaging in research that adds to the field of knowledge in the discipline, that makes connections among existing ideas within and across disciplines, or that results in the production of works of art in any medium.* Scholarship of application involves the *application of knowledge to issues of contemporary social concern* (e.g., attempting to change government or social agencies or assuming elected office in a state or national disciplinary association). The "teaching" option is the traditional weighting used in promotion and tenure cases by Montclair State University.

An FSIP project diminishes class load by one course (25 percent of a full load) each semester. Thus, an individual who has an FSIP in a PDS site, supervises in a PDS site (supervising seven students equals one course), and teaches a course on-site can locate 75 percent of her or his academic responsibilities in one school setting. This does not take into account the possibility of the more traditional "research" work that a professor is expected to conduct.

The role of administration in making this type of professorial life possible is noteworthy. For instance, a study undertaken as part of the FSIP change process suggested that not many faculty were teaching their full eight-course loads because of a reduction of teaching assignments for administrative tasks. To make the change to the FSIP process, the campus had to eliminate the practice of administrative release. A study following FSIP's initial implementation showed that as a result of the FSIP, the average class size increased by two students. Another finding was that traditional measures of academic quality (e.g., articles in peer-reviewed journals) had risen since the implementation of FSIP.

Perhaps the key administrative support function is that FSIPs must be approved by the dean. In a conversation, the dean stated that he gave "encouragement to do application work." Later in the conversation, however, his involvement was shown to be greater: "I have learned," he said, "to say no unless it matches the goals and principles of this college." Here the acceptance by the university of its ethical responsibility for the education of educators becomes key. Professional development schools, the NJNER, and the Center of Pedagogy *are* structural embodiments of the academic goals of the university.

Supports for School-Based Educators

To join the NJNER, districts agree to support the professional development of their teachers and to pay an annual fee of $2,000. In addition, school faculty members are paid for taking on teacher education responsibilities (i.e., teaching on campus, supervising), often from reallocated funds traditionally paid to university-based personnel.

Systemically, because of the FSIP and the NJNER annual fee, MSU is able to provide faculty resources to the schools. For instance, in the 1995-96 academic year, 26 faculty spent an average of eight hours a week for 26 weeks in the Wilson Middle School PDS for a total of 6,656 faculty hours. Some of this time came from the ten hours of free Montclair State University faculty consultation that comes with membership in the NJNER.

For example, in one PDS, teachers expressed disappointment with their students' writing abilities, a disappointment heightened by highly publicized poor standardized-test results. They sought out university experts and engaged them to provide staff development regarding the process of writing and how to teach it. Biweekly workshops were held from September through March. University faculty visited classrooms, looked at student writing samples, and, with the PDS teachers, tried to figure out what the data meant. Together, they decided on a plan. "Over time," wrote the PDS principal, "we have seen clear demonstration of the benefits of inquiry research put into active practice. The connectedness of inquiry and practice is much clearer and more inviting to PDS teachers as they see and experience more effective instructional practices. There is definitely an attitudinal change that has occurred toward inquiry.

There is more of a willingness and desire to grow. We have all come to see it as a conventional part of good, common teaching practice."

FSIP provides another source of support. For instance, one MSU faculty member mentored the principal and vice principal at Wilson Middle School PDS as his FSIP. He explained, "Wherever the principal needed help, that's where I would go, including redesigning custodial roles and schedules—the nuts and bolts of operation." He is also an example of the clustering of time in one site because he advised on-site graduate students and also taught a course on-site.

Whereas the Wilson Middle School example may be a best case scenario, membership in the NJNER supports all its members in a variety of ways. District membership in the NJNER yields—

- professional development for teachers;
- opportunities to work with MSU faculty at school sites and at the university;
- exposure to national figures in school and teacher education reform;
- a chance to collaborate and work with neighboring schools and districts; and
- the appointment of teachers as clinical faculty at the university.

To be appointed a clinical faculty member, a teacher must be identified as a learner and a teacher who wants to share expertise with neophyte members of the profession and who takes seriously the concept of teaching for critical thinking. The roles that clinical faculty members perform are outlined in the following section. Some of the logistical benefits of the role include university faculty parking privileges, library cards, and access to the curriculum resource center.

The role also carries with it certain requirements that both support school-based educators and enhance the caliber of support they in turn provide. These requirements include attending two workshop series a year. Topics of these workshops (coordinated with base university funding) have included Performance Assessment; Teacher Action Research; Mentoring and Coaching; and Working Toward School Change or "Why Won't He Pick Up His Socks?"

All clinical faculty must attend the summer Leadership Institute, which is also required of most Center of Pedagogy members. The purpose of the institute is to create a cohort of educators to lead the work of the NJNER by—

- developing a deeper understanding of the moral dimensions of teaching in a democracy;
- collaborating with all toward renewal of schools and preparation of educators;
- becoming agents of institutional change in their own organizations;
- conducting inquiry; and
- sharing their work.

Held from 8:30 to 3:30 daily for two weeks, the institute involves discussions, guest speakers, group action plans, field trips, and a "college-course amount of reading." In addition to the intellectual exchanges among a balanced population of education faculty, arts and science faculty, and school-based educators, participants receive a stipend, books, and food.

In the year following the institute, participants are charged with completing an inquiry/change project developed at the institute. For instance, one administrator/teacher team wanted to—

> develop an understanding of the self-directed/self-motivated student. Within the next two years, Dumont HS will restructure the schedule so that students will have additional unassigned time. Our vision is that students will possess the skills and attitudes necessary to utilize this time to gain greater access to knowledge.

Teacher study groups sponsored by the Center of Pedagogy provide another support for school-based educators. The study groups offer opportunities for teachers to take responsibility for their own professional development and renewal by engaging in collaborative learning and inquiry that will advance the center's agenda of simultaneous renewal of the schools and the education of educators. During the 1995-96 academic year, the center funded thirteen groups in eight districts. Each study group met for at least sixteen hours during the academic year and included a minimum of four teachers, one of whom had to be a clinical faculty member. Topics from the 1996-97 study groups ranged from Teachers, Tots, and Toys: Pre-K Inclusion to Addressing Issues of Homophobia in the Schools.

Supports for Prospective Educators

The schools who join the network are making the commitment to "really struggle to become better." That attitude is perhaps the lesson that prospective educators can learn. "By placing our students in Network schools that are committed to classroom and school renewal and teaching for critical thinking, we hope to help these novice teachers become stewards of best practice." According to one local principal, the students are learning that lesson: "As a group, they [MSU graduates] demonstrate a stronger sense of personal efficacy as teachers and a greater degree of commitment to the renewal of the schools, especially urban schools."

Within those schools, the efforts of individual educators are a huge support to prospective educators. The NJNER has selected and supported more than 300 school-based clinical faculty. These faculty supervise student teachers, teach and co-teach "university" courses, serve as cooperating teachers, and are leading participants in the NJNER professional development network. These roles add up to a whole lot of time very quickly. At Wilson Middle School, for instance, 54 of 62 school faculty engaged in PDS-related work for an average of ten hours a week, which equaled 540 hours of support weekly for prospective educators by school-based educators. This is another example of clustering of resources. The institutional point to make here is that fourteen of the 30 semester hours of professional education that New Jersey state law allows take place at that school.

Another institutional source of support to prospective educators is the involvement of the College of Arts and Science in their education. They are, the dean said, "immersed in teacher education issues." A university-wide task force on general university requirements defined MSU general education as having four components: writing, critical thinking, problem solving, and citizenship in a democracy—suspiciously similar to the goals of the NJNER. The College of Education met, and

continues to meet, with the other colleges and departments on campus. These conversations focus on how the Center of Pedagogy can support the cross-campus goals. Their message is always "You *are* educating teachers." Therefore, each of the supports for the university-based educators outlined above are available (and used) by non-School of Education faculty—Leadership Institute, Center of Pedagogy, and FSIP. Partially as a result of these outreach efforts, a teacher education liaison in every department participates in teacher education admission decisions and a content supervisor from the subject matter department observes three times during student teaching.

Finally, the students themselves are supports. One example of how Montclair State supports the caliber of students is its admissions criteria, which are related to the abilities, dispositions, and character required of the kinds of teachers our children deserve and our communities require. Rather than screen out candidates on conventional criteria, "we attempt to select in those students who complement that profile." To end where the description began, the following excerpts from the criteria for entry into the program are, in formalized language, precisely the dean's impassioned plea for the "kinds of teachers we need." A candidate—

- continues to inquire into the nature of teaching and learning and reflects on his or her own professional practice;
- possesses skills and dispositions necessary to establish a classroom environment that stimulates critical thinking and inquiry;
- understands principles of democracy and plans instruction to promote critical reflection on the ideals, values, and practices of democratic citizenship;
- understands and is committed to the moral, ethical, and enculturating responsibilities of those who work in the school—believes in the educability of all children and seeks to ensure equal learning opportunities for every student; and
- is committed to his or her role as a steward of renewal and best practice in the schools.

University of Cincinnati

The University of Cincinnati is a recently "publicized" university with roots as a City University. Over the past decade, it has increasingly balanced the needs of the community within which it resides with the more external demands of a research institution. Meanwhile, the city of Cincinnati, with enlightened support and leadership from the district, the union, and the business community, has been engaged in restructuring its public school system for the past decade. Professional practice schools (PPS) constitute only one of four streams of reform flowing in Cincinnati. The other three are the Career in Teaching Program, the Peer Assistance and Evaluation Program, and the Mayerson Academy. It is potentially misleading to discuss any one of the four streams in isolation. Therefore, though focusing on the professional practice schools, this exemplar addresses how the other three streams feed, and are fed by, the PPS efforts in the Supports for School-Based Educators section below.

The Cincinnati professional practice schools are a partnership among the school district, the teacher union, and the Cincinnati Initiative for Teacher Education (CITE),

which have worked together over a decade to develop a vision of Cincinnati Professional Practice Schools. The professional practice schools fulfill three functions:

- supporting student success;
- providing professional education and professional induction programs for teacher education students and for beginning and experienced teachers; and
- supporting systematic inquiry directed toward the improvement of practice.

CITE uses the following strategies to fulfill those functions:

- create high standards for academic and professional teacher preparation;
- create a supportive community for learning and professional practice;
- model effective practice in teaching and learning;
- recruit and support under-represented groups in the teaching profession;
- develop equitable school-university partnerships for professional education and professional practice;
- prepare teachers skilled in addressing cultural and individual diversity in metropolitan communities; and
- engage teachers and learners in self-study, inquiry, and reflection.

Constructing and maintaining these strategies required, in the words of one program founder, a "compulsion to entangle alliances. We can use each other to leverage partnership. Leadership from all the players has sold it to the public. No single partner can undercut it now without an outcry from school board members, city council members, state policy makers, business leaders, and churches." One of the first alliances was with the union. "We couldn't even have gotten in the door without strong up-front approval and support of the union." From the district's perspective, another key ally was the business community. The Cincinnati Business Committee (CBC), consisting of influential business leaders in the area, wrote a highly publicized report that according to a union leader,

> gave the superintendent the political impetus needed to begin restructuring. He set out to accomplish the commission's major recommendations on reorganizing the central office, improving teacher training and professional development, and moving authority out to the schools.

Program Description

The creation of Cincinnati Professional Practice Schools, when considered in the context of other efforts undertaken in Cincinnati, is one of the most comprehensive educational reform efforts in the country. Achieving its overarching goal of student success has not been a matter of simply plugging in a new program here and there but rather of changing the cultures of both the school and the university. Changing institutional cultures is difficult work calling for the reconceptualization of rigid institutional structures, the profession of teaching, and the nature of the work of educators.

The effects of the teacher education element of that work can be seen in the following comparison between the "old" program and the "new" PPS program.

"Old" Program

- Four years
- B.S. Education
- No graduate-level work
- Three quarters of field placements
- Ten weeks of student teaching with one cooperating teacher
- 30-60 units in a major
- 45-97 unrelated education units
- 45 units in general education

"New" CITE Program

- Five years with full-year internship
- B.S. Education and B.A./B.S.
- 18-27 credits graduate-level work
- Five to six quarters of field placements
- Three to six weeks of student teaching with multiple mentors in a PDS
- 54-90 units in a major
- 54-90 integrated education units
- 90 units in general education

The students experience an integrated blending of traditional discipline-based content, education-based content, and field experiences throughout their five years in the program.

- Year One: Arts and science courses, one "linking seminar."
- Year Two: Arts and science courses, field experience, and education seminar.
- Year Three: Arts and science courses, three-course education sequence (Schooling and Teaching; Human Development; Curriculum Decision-Making and Curriculum in subject area).
- Year Four: Arts and science courses, two or three education courses each term, and two or three field experiences.
- Year Five: Full-time teaching internship in cohort group and linked course work including portfolio development and presentation.

All field experiences based in the Cincinnati Public Schools occur in professional practice schools. The centering structural arrangement in a PPS is a "professional team" composed of lead teachers, career teachers, and student interns who share instructional responsibility for clusters of classrooms or teaching loads. Each team is led by a lead teacher mentor (LTM) who teaches on the team and has primary responsibility for mentoring student interns. Career teachers teach full-time on the team and mentor interns as instructional colleagues. Graduate student interns work half-time as beginning teachers while completing other teacher certification requirements. The professional teams in each building are coordinated by a school-based faculty/lead teacher coordinator. These individuals hold affiliated faculty appointments with the University of Cincinnati and are responsible for liaison with the teacher education programs, for the coordination of lead teacher mentors, and for professional education instruction.

Lead teacher mentors, lead teacher coordinators, and graduate interns are paid for their work. An understanding of the fiscal arrangements making this possible begins with the graduate interns. The interns, who possess a bachelor's degree in an arts and science major, are hired through the same process as any other first-year teacher. They teach one half of a full teaching load so they receive 50 percent of a beginning teacher's salary. The teaching positions are "captured" from open positions through contractual agreement. Because the interns teach half-time, one captured teaching position creates two intern positions. In the words of a college faculty member, "You get as many vacancies as you can and then you match up interns."

Since interns do the "real work of teaching," the district and the union support the use of district dollars to pay them. It is important to note that interns fill vacant positions. No teacher is ever laid off because of the captured slots. A union representative adamantly stated that the interns are "not cheap replacement teachers—that's not the bargain. We are not undermining the work force. There is no financial incentive to the district to hire an intern over a teacher. In fact, it costs the district money to have interns." The district is willing to assume the cost because it—

- has a hand in educating the teachers who will work there;
- has an advantage in recruiting exemplary young professionals into full-time positions;
- considers the work with interns to be professional rejuvenation for veteran professionals;
- has seen the quality education the interns offer the students of the district; and
- has better prepared beginning teachers.

Lead teacher mentors, who coordinate and facilitate all team activities, carry a half-time instructional load and a half-time supervisory load. While they perform supervisory functions, their classes are taken over by graduate student interns. Lead teacher coordinators, who coordinate school-wide activities and the communication between the school and the university, tend to be full-time school-based teacher educators. The "non-instructional" pay for both positions comes from a combination of district and university funds. Significantly, these positions, their roles and responsibilities, appear as line items in the district and university budgets as well as in the teacher's contract. The district, for instance, budgets 0.5 percent of its funds for a year to teacher training and support. Fourteen percent of the district's teacher training and support funding goes into the professional practice schools. Although the district funnels nearly a quarter of a million dollars a year to professional practice schools, one district official noted, "That is not much to have 100+ adults working with children daily and better prepared teachers who want to work in our district."

Ten schools functioned as professional practice schools in 1996. Combined, these schools established 21 professional teams and inducted 75 graduate student interns. The 21 teams created 55 new lead teacher positions and nineteen joint appointments between the district and the university.

Support for University-Based Educators

One initial and key support for university-based educators was the comprehensive approach taken by the university. By beginning totally fresh, it could do more than just plan a program, it could "actually build internal coherence." The university developed a system by seriously hammering out shared values and beliefs, which resulted in a shared language. In turn, this language made it possible to establish connections with larger external supports, such as INTASC, NBPTS, state licensure changes, the Cincinnati public schools, and the Cincinnati Federation of Teachers. As the university initiated the new program with the entering class of 1991, this set of experiences resulted in the development of competence rather than in the more often experienced challenges to change. When the interns arrived at the schools, the positive feedback on what they actually knew and could do led to even greater commitment to change. In the words of the dean, the faculty "have moved from disagreements on whether to do it to disagreements on how to do it."

The early engagement of arts and science faculty also supported, and continues to support, the university-based teacher educators. Once approached, arts and science faculty proved eager to participate, partly because by requiring a traditional subject-matter major, the plan offered them more than 800 additional students. In addition, arts and science faculty became aware of their role in teacher education, a role they embraced because of the value they place (and the College of Education shares) on the content knowledge of teachers. The engagement of arts and science faculty has been cemented over time with their discovery that the teacher education students are some of their best students.

The University of Cincinnati shares the first two supports with the other models described in this paper. Unlike most sites, however, UC did not begin with external planning money, but built the program and then used its excellence to attract additional funding. On completing the program design, the university also asked for a $750,000 annual budget augmentation to "buy something new." Although the fifth year of tuition would bring in some extra dollars, the argument was based on the value of quality. UC staked its request on several lines of argumentation. One was the ability to show the cost sharing to which the district and the union had already agreed. The dean remembers that in some ways, "External support made us a sacred cow. Our broad partnerships increase our social and political capital. You need as many people on your side as possible." Second, the crisis in the schools made visible the university's vested interest in K-12 education. As the third leg of the argument, UC explained the program as an attempt to professionalize teacher education by using the "paid cooperative model." Although this argument might not be successful in some settings, it was certainly compelling at the University of Cincinnati, which takes rightful pride as the original developer of the cooperative program model.

Asking for three quarters of a million dollars as a permanent annual augmentation to the budget was a bold move by the dean, but his risk-taking leadership has been another key support for university-based educators. He recalls the following:

> We had become too comfortable being a complacent cash cow. Like any group in deep denial we were caught up in a web of helplessness. ...Budgets dictate priorities and without money it isn't real and it doesn't happen. ...Stop thinking

poor. Stop thinking second class. For a whole College of Education, $750,000 is peanuts—but it was substantial enough to make a difference.

The provost granted the augmentation specifically to teacher education, not to graduate programs, arguing that the college already had enough social scientists. In fact, graduate research programs now have to show how they connect with professional preparation in order to make a case for resources. CITE is now one of three university budgeting priorities and has had a 20 percent budget increase over the past four years. The change shows up in the criteria for new hires as well as in permission to hire at all. Says the dean, "We can hire someone who works with and supports CITE or we don't get the FTE."

At this point, changes in privilege and tenure policies are "in the air." In retrospect, the dean wishes that he had pushed for these earlier both as an incentive and as a protection for faculty. Until privilege and tenure changes are made, the school will continue "to argue the position case by case. This has been a high-risk and time-intensive proposition." On the other hand, UC builds the labor of teacher education into the work life of a professor of education. Seven quarter courses a year constitute a full teaching load, and working with one team (e.g., three students) equals one course. This translates to one half-day a week "paid time" for work in professional practice schools.

Finally, the support of school-based educators provides a daily boost. One school-based educator said of her work with the interns, "We at UC are on the edge of something grand."

Supports for School-Based Educators

Cincinnati's other three reform streams, (Career in Teaching Program, Peer Assistance and Evaluation Program, and Professional Development Academy) provide substantial support to school-based educators as well as to the larger PPS project.[1]

The Career in Teaching Program (CIT) offers ongoing professional development, incentives to keep talented teachers in the classroom, and opportunities for highly proficient teachers to play leadership roles within the teaching profession. CIT possesses four rungs: internship, residency, career teacher, and lead teacher. Each level has its own salary incentives, methods of evaluation, professional standards, and support systems.

The two-year internship's purpose is to induct all newly hired teachers into the teaching profession by enhancing their teaching skills and developing the instructional skills needed by urban educators. During their three-year residency, teachers, using professionals as role models and mentors, gain confidence as instructional leaders, develop and expand their teaching styles, refine their teaching skills, and continue to use district resources to become more effective teachers.

To become a career teacher, a teacher must have served at the resident level for at least two years and have earned a continuing contract with the Cincinnati Public Schools. Career-level teachers perform their professional duties with less supervision than interns or residents. They are professional educators with the rights and responsibility that accompany the status, such as motivating and serving as role models to other teachers and participating in setting the direction for their school's educational program.

Teachers can remain at the career level indefinitely, but with at least six years experience, a teacher can apply for lead teacher status, a recognition of being in the forefront of the teaching profession and an acceptance of the challenge to share one's expertise. Only lead teachers are eligible for a number of professional leadership roles created by agreement between the Cincinnati Federation of Teachers and the Cincinnati Public Schools, including: interdisciplinary team leaders, curriculum development specialists, instructors in professional development programs, consulting teachers, and coordinators of new or special programs.

The Peer Assistance and Evaluation Program is a professional accountability structure staffed by lead teachers who serve a two-year term. There are two program models: one for teachers new to Cincinnati Public Schools (an internship model) and one for veteran teachers with identified serious deficiencies (an intervention model).

In the internship model, consulting teachers mentor and evaluate newly hired teachers, ultimately recommending re-employment or dismissal. The internship provides structural support and increased encouragement for newly hired teachers. It also meets the teaching profession's responsibility to children and their families by providing a rigorous screening at the entry level prior to career advancement.

In the intervention model, consulting teachers work with veteran teachers who show serious performance deficiencies. Following referral by either the building administrator or union representative, a consulting teacher investigates and reports to the Peer Review Panel that then decides whether to place the teacher in intervention. If deemed appropriate, the consulting teacher provides support and assistance for up to two years with periodic checkpoints and can recommend dismissal if the teacher has not improved to a satisfactory level. The assistance includes practicums, demonstration lessons, informal observations, and post-observation conferences.

The Mayerson Academy for Human Resource Development is a nonprofit organization established with foundation and business grants to provide training and development for Cincinnati teachers, principals, and other school staff. The Academy features impressive technological capacity and a well-stocked teacher resource center. The district provides 20 percent of the ongoing funding for the Mayerson Academy, with non-district funding sources (e.g., endowment, external grants) providing the remaining 80 percent.

Established through a school-business partnership and grounded on corporate models, Mayerson offers three levels of course work: core courses, in-depth action labs, and Socratic seminars. Core courses are introductory classes designed to build professional awareness and include school visits and school-site teaching. Action labs serve as follow-up and support for the prerequisite core courses. They give teachers opportunities for in-depth study of specific pedagogical and professional issues. Socratic seminars, typically taught by outside faculty or hired consultants, are designed to examine current educational topics and issues.

Eighty percent of Cincinnati Public School teachers have taken one or more courses offered by Mayerson in its first three years of operation, and all district principals have taken Mayerson courses, averaging 120 hours of training each.

These joint union-district initiatives cost money and have required the reallocation of funds along with the rethinking of responsibilities. As previously noted, the district provides 0.5 percent of its total operating costs to teacher training and support. Given the size of a large urban district's budget and its fixed costs, this is a significant

amount. According to union leadership, the elements of finance reform have included the following:

- cutting administrative costs by more than 50 percent;
- streamlining business services by eliminating the district's warehouse and by purchasing directly from private vendors;
- simplifying organization by eliminating several layers of central office bureaucracy and by creating simpler reporting lines for teachers and principals;
- encouraging schools to pool resources;
- increasing accountability through performance-based compensation programs for administrators and teachers;
- regaining voter confidence (e.g., the district now passes levies); and
- eliminating ineffective or low-priority programs.

The last item exemplifies the risk taking, and thus the leadership, necessary for such sweeping re-culturing. "Ineffective or low-priority" programs mean jobs and entrenched self-interests as well as, at least at one time, a response to an identified need. When the district, with union support, overhauled vocational education, cut 66 positions from under-enrolled programs, and eliminated 99 positions not related to the district's primary educational focus (e.g., drivers' education and high school athletic directors), they built a totally new way of doing the business of education.

The role of the local union, as co-equal constructors of the district's budget, cannot be underestimated. The current system is an open process in which everything is laid openly on the table. By following the dollars and then reallocating them, teachers and administrators can better match resources with educational priorities.

Through this mechanism, the Cincinnati Federation of Teachers now has some authority in budget decisions. With authority, however, comes responsibility. Said one union leader, currently working in the central office and paid from the superintendent's budget, "It is easy to attack and be popular with members. It is much harder to have all the information and to be involved in hard decisions. We have to be able to defend our roles in those decisions. We are more of a target because we are now accountable." The results, however, benefit children and teachers directly, as well as enhance public support for education. The headline in the *Cincinnati Post*'s editorial pages following the last contract agreement read: "The New Cincinnati Public Schools Contract Is a Winner All Around."

Supports for Prospective Educators

. The school-based team consisting of a lead teacher, several career teachers, and the interns shares instructional responsibility for clusters of classrooms and teaching loads. This team, guided by the school-site lead teacher coordinator, provides the centering support for the interns and the undergraduate students completing field experiences. The lead teacher mentor, in Cincinnati parlance, teaches "three bells" in the morning and is "free" in the afternoon to serve as supervisor and as team leader. The internship is intensive and carefully monitored. The interns have already completed three years of field experiences and possess a bachelor's of arts and science degree. (UC students receive their bachelor's of education degree and their teaching

certification on successful completion of their internship and fifth-year coursework.) This is more preparation than many credentialed first-year teachers receive. Interns, however, receive additional support prior to assuming teaching responsibilities. For instance, early in the summer before the internship, the lead teacher mentor meets with the interns employed by the school to provide district curriculum and materials and to help the interns outline an instructional plan for the year. Three weeks before school starts, the entire team meets to flesh out the skeletal plan, which leads to a nearly minute-by-minute map of the first week of classes.

Although the teams form a key support, the program is called professional practice schools and not professional practice teams for a reason. Each school completes an application requiring a unique vision for the school as a professional practice school—a vision integrated with, and arising from, the school's existing programs and foci. In the words of the application, a PPS

> is a site that has made special staffing and resource provisions to facilitate learning, interaction, collaboration, and inquiry. It is not a place removed from the realities of schooling and teaching, but one where these realities can be experienced, examined, and if need be, modified.

PPS selection is based on the following rigorous criteria:

- the ability to engage in creative and collaborative planning and decision making;
- the process used to decide to become a PPS;
- the process used to develop and write the application;
- staff commitment to the PPS concept and continued participation in development;
- community support and commitment;
- cohesive leadership among administrative and teaching staff;
- staff and community involvement in school restructuring, innovation, and improvement of professional practice;
- commitment to, and experience in, a process approach to an inclusive curriculum and instruction compatible with CITE;
- school diversity;
- staff leadership in preservice teacher education, professional development and research; and
- the ability and willingness to reconfigure site facilities for instruction of CITE students and for addition of teacher education staff.

In addition to the support of the team, and the caliber of the school site as a supportive environment for teacher learning, the university also pitches in with financial as well as educational support. For instance, in 1996-97, an unanticipated reduction in state funding of education created a budget crisis, and experienced, fully credentialed, teachers were laid off. Therefore, there were not enough intern slots for all CITE students. The university provided graduate fellowships, which, when combined with the intern's district salary, compared favorably with the first-year salary of a half-time "regularly" credentialed teacher.

University of Louisville

The University of Louisville is a private university with a rooted tradition of progressive involvement in the public schools. Earlier this century, for instance, the university subsidized the salary of the Louisville superintendent of schools when financial needs threatened the well-being of the city schools. In more recent years, much of the university's continuing collaborative work with schools has been housed in the Center for the Collaborative Advancement of the Teaching Profession (CCATP). Established in 1987 by the Kentucky Council on Higher Education, the CCATP is one of five Commonwealth of Kentucky Centers of Excellence and the only one in education. The center's function is to develop, enact, and evaluate collaborative efforts to improve teaching. It is a key structural component blending university and school efforts to enhance teaching in ways that alter traditional roles and boundaries. The center serves as the infrastructure for professional development school projects and houses other related projects:

- Redesign of Teacher Education Programs;
- Professional Development Community: A Model for Interdisciplinary Teaching, Service and Research to Promote Student Success Through Wellness for Urban Children and Families;
- Louisville Writing Project;
- ACT Project; and
- Comprehensive Program to Encourage Minority Students to Become Teachers.

Program Description

The University of Louisville has three regular teacher education programs: K–4, Middle Grades, and High School. All three begin with the same values encapsulated in "The Cardinal Creed."

> The University of Louisville is a community of scholars dedicated to personal and academic excellence. In joining this community, I commit to a code of civilized behavior. I will practice personal and academic integrity. I will respect the dignity of all persons. I will respect the rights and property of others. I will not condone bigotry. I will strive to learn from differences in people, ideas and opinions. I will demonstrate concern for others, their feelings and their need for conditions which support their work and development. Allegiance to these ideals requires me to refrain from behaviors which threaten the freedom and respect every individual deserves.

Initially this discussion focuses on the K–4 MAT program. Although the general themes apply to all three programs, they play out somewhat differently in the three because of the different roles and contexts for which the programs prepare candidates as well as personnel and contextual differences among the programs.

The teacher education program begins with prerequisite knowledge, skills, and dispositions in three areas: human development and learning, socio-cultural awareness, and contemporary schooling. Prospective students can meet these prerequisites through course work at the university, through life experience, or through other forms

of alternative assessments. The program itself requires a full-time one year commitment and includes working with elementary school teachers from the beginning to the end of the public school year (8:00-3:00, Monday through Thursday) as well as courses in teaching methods, case study analyses, and special topics. The capstone seminar is an opportunity to report on action research projects conducted during the yearlong field experience.

Based on a "Teachers as Learners and Leaders" model, the K-4 MAT is designed to enable students to determine their entering assumptions, clarify their aims for teaching, understand current research on teaching, analyze and discuss a wide range of educational issues, develop the capacity to implement developmentally appropriate instruction, and engage in reflective self-evaluation. The program also assures the state that their candidates meet Kentucky's standards for teachers.

The program reflects the university's long-term commitment to a strong field-based program with four professional development school relationships with Jefferson, Oldham, Shelby, and Bullitt Counties. Schools within these counties have made a school-wide commitment to preservice teacher education as well as to the continuing education of practicing teachers. One participant calls it "a collaborative effort across school and university to help in rethinking what school means to kids and to teachers. The payoff is improved learning for kids and better preparation of new and experienced teachers." Another describes it as "an effort to do a number of different things at the same time: teacher education, continuing teacher development, and school renewal. And everybody brings their experience and expertise to the effort."

Support for University-Based Educators

Louisville has had a stable cadre of university-based educators who have been intellectually, physically, and emotionally engaged in building school-university partnerships for more than twenty years. At this college within the university, the norms did not have to change suddenly to establish professional development school communities. Of the four sites described in this paper, Louisville possesses the longest history and therefore has fewer structural changes to report. After more than two decades, the PDS work is nearly invisible to university faculty. It is simply how the university does things. Another difference between Louisville and the other three sites is a different mix of informal-individual and formal-structural approaches to change. Louisville's approach has been relatively less formal, more individual dependent, and more focused on attitudinal change. The other sites approached change with a heavier emphasis on constructing structures and processes to spur attitudinal change and to support individuals. For instance, Louisville, responding to the NCATE survey, wrote the following:

> We have designed a PDS Model that works for us and have been allowed to do that. We have not formally changed roles. …The work is relationship based. …Change occurs initially with the individuals who then attempt to create a climate for change in the institutions. The key to PDS work is relationships. The institutions do not work together, people do.

The issue, however, is one of a different mix rather than a case of either-or. For instance, informal and individual does not suggest a refusal to "go public" with contractual-like agreements or with explicit individual or institutional expectations (e.g., standards). The Louisville model does include signed contractual agreements between

the partners that include a PDS site-based council with explicit decision-making authority. The model also uses explicit standards for curriculum, student assessment, beginning teachers, new teacher evaluations, and professional development.

Structures and processes have been essential. For instance, if the "unit of change" is individual rather than structural, the structural factor of hiring criteria and processes still exists. The will and the skill to work constructively with school-based educators have been University of Louisville criteria for hiring faculty for at least two decades. Not coincidentally, these currently university-based educators worked in K-12 settings before undertaking their professional roles in a university setting. One often overlooked benefit of K-12 experience for university professors engaged in school-university partnerships is the reciprocal respect for, and understanding from, their school-based partners. That respect and understanding are huge supports for university-based educators, especially teacher educators for whom school-based educators are natural, if not often realized, allies.

The College of Education's work in and with schools has been supported by the campus as a whole. The education of teachers—preservice and in-service—has long been acknowledged as an essential component of the university's mission. For example, the president personally contacts donors with funding requests for teacher education initiatives and teacher education is one of five exemplary university efforts in the highly public, and therefore highly influential, President's Priority List.

More formally and structurally, campus-wide support was exhibited in the reduction of numbers required for a quality program. The "old" program enrolled 150 students a year; the new program currently has only 45 students a year. Even when fully operational, the new program will enroll only 75 students a year. The university also allowed time for the program to grow. This institutional patience is no insignificant matter, since the phasing out of the old and the concomitant redistribution of funds (a highly structural factor) entailed difficult discussions and decisions.

The positive financial outcome of the campus's willingness to support quality teacher education is that the University of Louisville never resorted to the use of soft money for faculty workload in teacher education. Specifically, the new position of PDS liaison counts as one course semester or, in terms of time, one day a week on-site. In addition, PDS sites have "definite priority" for "discretionary resources," whether garnered under the auspices of the Center for the Collaborative Advancement of the Teaching Profession, release time for *college-sponsored* research projects, or individual faculty member initiative. For instance, one K-4 MAT professor spends an additional half-day a week on-site with a Family-School Study involving teacher-researcher teams conducting in-home interviews over time with families.

Support for School-Based Educators

Support for school-based educators takes numerous forms in the Louisville model, including varied opportunities for interaction with university-based educators, district and union support, blended funding arrangements, and, certainly not least, the prospective teachers.

The Louisville model provides opportunities for interaction with multiple entry points and "projects" for school- and university-based educators to work together. One entry point consists of designing the standards, the programs, and the assessments for teacher education. This entry point affords continuous opportunities for productive

interaction through quarterly "mentor meetings" at which all educators engaged in the education of professionals take stock and make necessary midstream adjustments to stay on course. The reciprocal respect inherent in these meetings is an important support for educators, as is the honorary position of adjunct faculty. As one teacher remarked, "It is important to be heard."

Another entry point is in the collaborative research projects mentioned above as supports for university-based educators. A third entry point is as a "student" in the Louisville doctoral program. A fourth opportunity is engagement in the action research-school change projects that the University of Louisville students complete as part of their program requirements. In these projects, the school staff generates what they would like students to study and do. From this teacher-generated list, the students choose a project to pursue. This process, like Connecticut's fifth-year internship model, helps the schools and helps the prospective teachers learn about schools. As one student summarized, "Not only is it hard to find out what people wanted, we had to learn how to negotiate when people want different things."

Because Louisville is in a site-based management (SBM) state, district and union support coalesce to provide the flexibility required to create non-traditional roles and responsibilities. At Fairdale, one of the PDS high schools, one "teacher" position is dedicated to managing and facilitating the multiple grants, professional development initiatives, and magnet school program and to providing time for teacher reflection and growth. In addition, an SBM school can decide to set aside contract provisions. One PDS, for instance, wanted to implement teacher-based guidance (sometimes known as advisories). This, as those familiar with the movement can attest, caused problems because the advisory can be considered an additional "prep" and thus put the school out of compliance with the teacher contract. Because of district support (and now state mandate) for SBM, the union became a supporter and an advocate for the teacher-initiated change effort—and teacher-based guidance happened.

With a history of relationships, district and union support, and the existence of two well-established and respected funding structures (the Center for the Collaborative Advancement of the Teaching Profession and the Gheens Academy), Louisville has been able to blend funding sources to the benefit of all involved. One example of blended funding is the "Different Ways of Knowing" (DWOK) project, a model for professional development for teachers and curriculum reform developed by the Galef Institute in Los Angeles, California. Initially, a grant from the Kentucky Department of Education (with continued funding from the Philip Morris Companies) made it possible for university faculty members, teacher education students, and mentor teachers in PDSs to collaborate to use Different Ways of Knowing as a lever for whole-school reform.

During the summer, school- and university-based faculty who will integrate Different Ways of Knowing into their course work receive orientation and training. The district provides some summer staff development funds or allows in-service credit for these workshops. In addition, some schools use the $3,500 the university provides as a mini-grant for school-wide (not just cooperating teachers) program development to support continued DWOK work during the academic year. Elementary teacher education students are introduced to DWOK in their fall courses and are given the opportunity to work in schools with teachers using the program for their student teaching requirement. The project gives all student teachers a Different Ways of Knowing module to take to their initial teaching assignment. The blended funding of

DWOK constructs a vehicle for merging the preparation of new teachers and the professional development of experienced teachers by using content-rich resources adaptable to the context of the classroom. "It is amazing," says one principal, "to see what happens for teachers and preservice student teachers who have the opportunity to learn together."

Last but certainly not least, the prospective educators placed in professional development schools from 8:00 to 3:00 Monday through Thursday for the entire school year support school-based educators. The students, with a solid grounding in teaching, life, and academic knowledge guaranteed by the rigorous program prerequisites and screening into the program, are capable of large teaching responsibility from the very beginning. One teacher commented, "If you were to walk in off the street, you wouldn't know that (student teacher) wasn't a full time faculty member.…She acts like a teacher, she interacts with the students like a teacher, she even comforts students like a teacher." A principal at a PDS concurred, noting, "We see teacher education students as resources that can assist restructuring."

Supports for Prospective Educators

The prospective educators learning in the professional development schools bring a lot with them. They are not stereotypical undergraduate student teachers. Most are second-career MAT students with an average age well over 30. In addition, the prerequisites mean that they share a common core of experiences and knowledge that has been assessed in multiple ways, including college course work and life experiences. All involved with the program comment on the value of the life experiences of the students. One faculty member put it this way: "Knowledge without experience is water with no pitcher to carry it in."

The rigorously revised admissions criteria and processes also ensure a high-caliber student, which translates into a supportive cohort group once the students enter the program. To apply, students must meet explicit standards for—

- content-based knowledge;
- intellectual abilities (e.g., enthusiastic readers and effective writers with the ability to analyze, synthesize, and apply knowledge);
- personal qualities (e.g., eager learners, non-biased, able to evaluate self, energetic and enthusiastic, empathetic); and
- professional qualities (commitment to teaching profession, clear understanding of schools).

The process also includes individual and group interviews with school administrators, school- and university-based teacher educators, and current students. At the same time that the program has introduced higher standards, more rigorously assessed, it has more than doubled the percentage of people of color admitted into the program since the change.

Once students are admitted into the program, they are supported by both the PDS liaison and a mentor teacher. The PDS liaison support role includes (among other functions) the following:

- reviewing the handbook with students and mentor;

- discussing the developmental time line with mentors and students;
- meeting regularly with the mentor teacher followed by liaison meetings with teachers;
- reviewing weekly action plan (see below);
- providing assistance in compiling portfolios;
- clarifying the purpose of, and scheduling, rotations;
- ensuring that visits to other PDS sites are planned and structured; and
- conducting observations and post observation conferences.

The mentor teacher support role includes (among other functions) the following:

- reviewing the handbook with students and liaison;
- orienting students to classroom and school (entry conference, daily schedule, expected time of arrival and departure, strategies for grouping students, behavior management techniques, methods of assessment, Kentucky's Seven Critical Attributes of primary programs, school policy, school curriculum, IEPs, student cumulative folders);
- conducting three to five observations, using appropriate forms;
- engaging in a minimum of three extended reflective conversations and conversations following each lesson taught by the student teacher;
- reviewing lesson plans;
- reviewing and discussing master's portfolio three times each year; and
- debriefing weekly action plan (see below).[2]

The Louisville model contains several structures and processes to maintain reasonable time demands. One example of such a process is the weekly action plan. Each week the student teacher reflects on his or her week and responds in writing to the following prompts:

My accomplishments last week were —

Things I would do differently are —

Goals/Areas I am working on include —

The support I need is —

Both the mentor teacher and the liaison review and sign this document to acknowledge their understanding of the issues raised and their responsibility to help support the student teacher. This document forms the content of the triad's work for the week. Often, something as simple as this system of communication focuses efforts and keeps the multiple roles and multiple institutional responsibilities from becoming overwhelming.

Cross-Site Analysis

Each site used context-specific strengths and environmental opportunities to facilitate, create, and sustain its professional development school efforts. Once the sites became operational, however, remarkable cross-site consistencies emerged in how they (a) clustered resources and (b) supported school-based, university-based, and prospective educators.

Clustering Resources

The programs placed university students in small numbers of school sites for extended periods. Each developed public criteria and public processes for the selection of the sites where resources would be clustered. These public statements served to make visible traditionally masked power and status relationships that often destroy the potential of relationships across institutional boundaries. The student clusters brought with them university- and school-based faculty who also work in teams. These *teams* constitute support for the educators doing the work of PDSs, as long as (a) the necessary additional *time* is created or provided for the constructive conversations that constitute the core of collaborative work and (b) the institution(s) recognize and *reward* the work of collaboration. Clustering, in and of itself, creates *some* time because coordination is easier and travel time is significantly reduced when people are located in the same physical context. The clusters themselves also constitute support for all three sets of educators. The potential of cohorts to overcome traditional isolation applies as much to college-based educators as to school-based educators and prospective educators.

Each of the visited sites also clustered financial supports by blending multiple funding sources. The blending operated on an unspoken assumption that anything that enhances the educational experiences of school students ultimately supports the adults who work with them. Thus, blended funds always found their way to augmenting services for school students. Montclair's faculty scholarship incentive program reallocated university time (equals money) from quasi-administrative tasks to support for school-based educators (i.e., revamping the writing curriculum). District and Center of Pedagogy funds augmented the effort. Students received better opportunities for learning. The prospective educators received better classroom-based opportunities for learning their chosen profession.

Although no one site used the same mix or the same order, all blended and reallocated base university funds, base district professional development funds, and public and private external funds. Whether through administrative encouragement or the practicality of time for university-based researchers or the "bonus points" generated by having a school-university partnership, the clustered sites gained an advantage for obtaining external funds. This advantage grew with the establishment of a third, outside institution (e.g., Montclair's Center of Pedagogy, Louisville's Center for the Collaborative Advancement of the Teaching Profession). These institutions serve as an infrastructure for collaboration free from the bureaucratic constraints and traditional status issues of either the university or the district as the funneler of funds. Prospective educators also bore some of the costs through delayed income and additional tuition and fees accompanying longer and more intensive professional preparation (i.e., a fifth year in all the sites except Montclair State).

Clustering involves the reallocation of resources and thus is a political act. For instance, by clustering the resource of student teachers and interns within selected schools, fewer schools have access to them and to the university personnel who come with them. As a political act, clustering requires leadership and coalition building. In the visited sites, this leadership came from higher echelons of each participating institution so that each would have the patience to let the program become successful and support the program through the inevitable complaints that accompany shifting professional responsibilities and realigning funding patterns. Institutional patience is essential because time is a necessary component of trust. "Trust developed only as it became clear to teachers and students in the PDCs that we were indeed committed to a long-term presence, and that we would in fact be in the schools both in substantial numbers and on a regular basis" (Case, Norlander, & Reagan, 1993, p. 28).

Additionally, the support of the university, the district, and the union—present (and often accompanied by funds) in each of the four sites—built community capital for change. High-level engagement from all the parties early in the process was essential because of their ability to help overcome such cross-cutting institutional constraints as inhibiting contractual arrangements, hiring practices, and time usage. In addition, people in positions of institutional power have the ability to make policy by telephone. They have access to other power brokers in the community who, with a phone call, could ensure that budget cuts were not automatically passed on to the "new program."

Supports for University-Based Educators

An abiding belief, and related actions, that the education of educators is a fundamental responsibility of an institution of higher learning constituted the indispensable support for university-based educators engaged in PDS efforts. This valuing of the professional education of educators was similar across sites. It enabled sites to start from scratch, which, in turn, enabled programs to build on values-based coherence. This requires time, and the visited PDS communities gave the work the time it requires—for planning as well as for enacting values-based plans.

When professional preparation is an institutional responsibility, the significant role of arts and science faculty follows. When invited, they too became immersed in teacher education. Although these university schools are traditionally housed in separate institutional structures on university campuses, the PDS projects found ways to integrate "content" and "pedagogy." The integrated efforts of education and arts and science faculty support all three sets of human resources, but especially university-based colleagues as the roles, rules, and relationships of a university change. Supporting quality over quantity constituted another significant action indicator of university responsibility. Each site either remained small or reduced the number of enrolled students in teacher education programs. As with schools, small and personalized settings create better conditions of learning for both faculty and students. As Case and others (1993, p. 30) wrote, "By limiting enrollments, we ensured a faculty-student ratio that allows for a strong field-based program."

Another set of supports for university-based educators centers on personnel decisions. The "right kind" of positions must be established and the "right kind" of professional educators recruited and hired into those positions. Then the "right educators" must have what they do match what the university pays them to do and

rewards them for doing. Each visited site shared one nonnegotiable criterion for new hires: they must be able to do "PDS type of work." Although in slightly different percentages, each site "counted" collaborative labor (i.e., work in schools and program development) as part of instructional or research workload, not as "service." Finally, the sites found ways to retain and promote college faculty able to establish and maintain professional development school initiatives, from rewriting promotion and tenure requirements to arguing each on a case by case basis. Of course, some people did more work for less pay than others did. The bottom line, however, is that these sites found ways to recruit, hire, maintain, and promote capable and competent collaborative educators as university faculty.

Less structurally, the partnerships supported university-based educators with the inherent collaborative nature of professional development school work. They gained entry into the expertise and issues of school-based educators. They established relationships and coalitions with natural allies often separated by status and institutional boundaries. Finally, they earned the respect that comes from making a difference in the lives of children and their families.

Supports for School-Based Educators

The "prize" for school-based educators in PDS work proved to be the opportunity to work with well-qualified prospective educators. This played out in three areas: (a) the professional rejuvenation experienced by veteran educators; (b) the benefits experienced by school students; and (c) the school change action-research projects completed as part of the preparation programs. Although more traditional teacher education programs contain elements of these three support areas, the visited PDS models expanded and enhanced each. For instance, cooperating teachers always work with student teachers. In these PDS models, however, the school-based educators engaged in planning, enacting, and assessing the program. Thus, the traditional model provides inspiration ("I am so inspired that good people are entering the field"), but the PDS model provides inspiration *and* opportunities for growth. Perhaps the most noticeably different benefit is in the school-change projects. In the traditional, short-term, individual classroom placement model, prospective educators cannot undertake such projects because they are not members of the school community. In addition, this rethinking of the nature of student teaching often leads to rethinking classrooms, traditional notions of "delivering instruction," and the role of the teacher.

The visited sites exhibited enhanced recognition of the knowledge, skills, and dispositions of school-based educators. Professional respect and professional responsibilities were made manifest with such official university titles as "adjunct" or "clinical" faculty. These titles were more than just names. They indicated a role change for teachers from "doing what they are told" by those external to the classroom to assuming leadership roles in the educational enterprise. These recognized leadership positions gave school-based educators opportunities to work more intensively and substantively, with: (a) other veteran school-based educators (within and between school networking), (b) university-based educators, and (c) prospective educators. These opportunities took the form of teacher study groups, teacher research and research collaboratives with university-based educators, summer institutes, and curriculum and program development. The clustering of resources meant that these were "team"

opportunities that gained value from collaborative efforts. The benefits of a cohort group accrued to the school-based educators as much and as often as to university-based educators or prospective educators.

School-based educators often received financial benefits as well. When they took on traditional university responsibilities, such as supervision or teaching courses, they received the basic college wage for such work. Several of the visited districts allowed teachers professional development credit for their work as teacher educators. Other sites provided college course credit or free courses as payment for taking on roles in professional preparation. All sites credited the professional development opportunities listed above (study groups, research, summer institutes). Several credited work as a cooperating teacher as meeting professional development requirements. Finally, external funding often translated into additional funding for the additional roles that school-based educators took up in PDS-related grants.

Supports for Prospective Educators

Each of the preparation programs connected with the visited PDSs made remarkably similar programmatic changes in their teacher education programs. First, they expanded their programs in terms of time, content, and field experiences. Second, they clustered time, content, and field experiences. In addition to expansion and clustering, each site used cohorts as a key program structure—small groups of students with sustained contact with one another as well as with groups of school- and university-based educators. The caliber of students engaged in the programs supported these cohorts—the stronger the "raw material" of the cohort, the stronger the cohort's capacity to construct knowledge, given knowledgeable and timely facilitation.

Across the sites, the programs selected students on the basis of more rigorous admissions standards more authentically assessed. The students in these cohorts, as a result of programmatic structural changes, had more academic background in the subjects taught in schools. They also had more opportunities to experience the linkages between content and pedagogy in their own education. That is, their own post-secondary education consisted of "content" and "education" courses occurring simultaneously and drawing from each other. More, earlier, and better organized field experiences for students prior to extended internships further strengthened the content-pedagogy link while offering grounding for current academic studies as well as background for subsequent professional studies.

In the visited sites, school-based educators were essential members of the program faculty, as program planners, evaluators, and instructors. This expanded role of school-based professionals was itself expanded when the programs used the school site as the unit of placement rather than a single cooperating teacher. When sites broke out of the individual mode of one cooperating teacher-one student teacher, the pool of school-based support for university students expanded dramatically. School placements, long-term institutional commitments, and clustering time in a smaller number of sites make it possible for students to become members in the school community, which results in their having access to a much wider array of school-based resources. Access to the whole school as an environment for learning makes possible meaningful school-based assignments (e.g., site-defined change projects, useable curriculum development). These, in turn, provide support for school-based educators, for prospective educators, and most important, for students in the schools.

Implications for PDS Standards

Professional development schools are more than a good idea. They are a good idea with referents in the material world. They are possible because the visited sites have established and sustained PDSs even through personnel changes and budget cuts. Except for the University of Cincinnati, these educational communities did it without large-scale augmentations of the base budgets of either the districts or the universities. When the conditions are in place, and when creativity and talent are supported, benefits accrue to the students in the schools, to the prospective teachers (and into their early teaching career), to the school- and university-based educators, and to the multiple institutions who share responsibility for the education of children. In addition to documenting the possible, the sites studied raise questions about the nature, and ongoing development, of standards for professional development schools.

The Nature of PDS Standards

If life were linear, the implication from this research would be to list cross-site commonalities as PDS standards. The problem is that neither life nor the slices of life known as professional development schools are linear. The sites described and analyzed in this research were mature PDSs. Maturity comes only with time and growing pains. The sites, although arriving at similar mature states, did not reach maturity in the same order or all at once. Thus a listing of traits of maturity (called PDS Standards) would most likely inhibit development. This begs the question of the purpose of PDS standards—to support development or to anoint attainment?

Even though all the sites basically started from scratch, they began from their own set of strengths upon which to stretch and build. Thus, each site began in a different place and "grew up" at different rates in different areas of professional development school work. A garden metaphor better explains the process than a mechanical one that begins with "designing structures" or "scaling up." How can standards be written so that they nurture the conditions of growth? What kinds of standards work to plant, grow, and sustain a PDS? Within a gardening metaphor, however, "structural" issues still must be addressed. A garden is not romantic magic, and in a PDS, educators and institutions do not magically transform with the wave of a fairy godmother's wand.

Standards possess the capacity to make visible the conditions that support growth. The question for standards writers is how to make visible the symbiotic relationship between people and policies. Each site visited, in context-specific but "conceptually similar" ways, co-evolved explicit policy supports (contracts, governance agreements, covenants, etc.) and human relationships. When educational change puts policies in place without thinking about, and providing time for, the "extra-rational" components of human relationships and learning the work never gets off the ground regardless of the sums of money attached to the policies. In contrast, when educational change places a sole emphasis on human and relational components, the changes do not survive personnel changes or, worse, they never get off the ground because "flexibility" masks power and status relationships that destroy the potential of the human relationships. How can standards be written, and interpreted, so that the necessary symbiosis of human relationships and policies be established (if not already present) and sustained (if already happening)?

Ongoing Development of PDS Standards

The NCATE PDS Standards Project has the opportunity to develop empirically based answers to these difficult questions. To do so, this study suggests several important "validity" studies of the draft standards. The first step is to try out the standards in PDS communities of varying levels of maturity. Each of these pilot sites should be studied and case studies produced that include an analysis of—

- the values that seeded the efforts;
- the different ways the standards are used to support the enactment of those values; and
- the manner in which the different uses support and constrain the growth of professional educators and students.

Particular attention needs to be given to the supports and constraints of standards usage on traditionally under-represented populations of prospective educators and under-served school students. Although each of the visited sites either maintained or increased the percentage of students of color in its preparation program, there is cause to fear the effects of greater financial burdens on prospective educators as well as the distinct possibility that higher standards will be assessed in such a way as to exclude nontraditional students. These case studies could become consequential validity studies if they analyze the standards not in their own terms (the content and construct validity of the draft standards has already been established in the process thus far), but rather in terms of what they do and do not do for the professional educators who do the work—school-based and university-based educators and prospective educators. To that mix, of course, must be added the school students, not just the students in PDS school sites but the students of professionals educated in PDS models and now working outside of a PDS school.

Finally, this study documents some of what can be learned from educational communities who have PDSs with a history. The findings presented, however, are only a small portion of the potential banquet. Thus, I recommend a series of opportunities for those sites whose work is highlighted to celebrate and struggle together (in the same room for an extended period) over their successes and their challenges. These conversations, if facilitated and documented, would support their work and provide deeper entry into the wisdom they have to share.

Notes

[1] The following discussion draws heavily on the work of, and owes a debt of gratitude to, Rustique (1996).

[2] Once again, despite an informal, individual dependent approach to change, these expectations are visible and public.

References

Case, C., Norlander, K., and Reagan, T. (1993, October). Spotlight on sites: University of Connecticut. *Center Correspondent*, No. 5, Seattle: Center for Educational Renewal.

Darling-Hammond, L. (1994). *Professional development schools: Schools for developing a profession.* New York: Teachers College Press.

Goodlad, J. (1990). *Teachers for our nation's schools.* San Francisco: Jossey-Bass.

Holmes Group (1986). *Tomorrow's teachers.* East Lansing, MI: Author.

Holmes Group (1990). *Tomorrow's schools: Principles for the design of professional development schools.* East Lansing, MI: Author.

Holmes Group (1995). *Tomorrow's schools of education.* East Lansing, MI: Author.

Levine, M. (1992). *Professional practice schools: Linking teacher education to school reform.* New York: Teachers College Press.

Levine, M., & Trachtman, R. (1997). *Making professional development schools work: Politics, practice, and policy.* New York: Teachers College Press.

Monk, D., & Brent, B. (1996). Financing teacher education and professional development. In J. Sikula (Ed.), *Handbook of research on teacher education* (2nd ed.). New York: Macmillan.

Norlander, K., Case, C., Reagan, T., Campbell, P., & Strauch, J. (1996). The power of integrated teacher preparation: The University of Connecticut. In L. Blanton, C. Griffin, J. Winn, & M. Pugach (Eds.), *Teacher education in transition: Collaborative programs to prepare general and special educators.* Denver: Love.

Odden, A. (1994). Including school finance in systemic reform strategies: A commentary. *Finance Briefs*, (FB-04-5/94). New Brunswick, NJ: Consortium for Policy Research in Education.

Rustique, E. (1996). Raising professional standards in Cincinnati: A case study of district-wide school reform through the professional development of teachers. New York: National Commission on Teaching and America's Future.

About the Contributors

Marsha Levine, editor of this volume, is the Director of the PDS Standards Project at the National Council for Accreditation of Teacher Education. Since 1979 she has worked to improve the quality of teaching in public schools by engaging the business community, teachers' unions, and schools of education. Her most recent publication is *Making Professional Development Schools Work: Politics, Practice, and Policy* (Teachers College Press), co-edited with Roberta Trachtman. She is currently the Director of an NCATE project to field-test the PDS draft standards.

Gary Sykes is a professor in the departments of educational administration and teacher education, College of Education, Michigan State University, where he specializes in policy research related to teacher professionalization issues and school choice policies. Currently he is a program area coordinator for the National Partnership for Excellence and Accountability in Teaching (NPEAT), and is conducting several research projects related to charter schools and choice in Michigan. He is co-editor, with Linda Darling-Hammond, of the forthcoming volume, *Teaching as the Learning Profession* (Jossey-Bass, in press).

Lee Teitel has been active in understanding and promoting professional development school partnerships since 1989. His work focuses on PDS start-up and institutionalization issues, new leadership roles in PDSs for teachers and principals, and the impact that involvement with PDSs has on the transformation of teacher education. Lee is active in promoting professional development school partnerships at the University of Massachusetts at Boston, where he is an associate professor and former associate dean for Community, University, and School Partnerships.

As an education consultant, **Roberta Trachtman** works with schools and districts to help them examine and re-invent their approaches to support the professional development of teachers and administrators. As an NCATE researcher/consultant, she is engaged with educators around the country to understand the ways in which professional development school standards support the growth and monitor the development of PDSs.

Donald Freeman is Professor of Second Language Education at the School for International Training in Brattleboro, Vermont, where he directs the Center for Teacher Education, Training, and Research. In 1991, he and Kitty Boles collaborated with area colleagues to establish the Windham Partnership for Teacher Education, which was the first PDS nationally to focus exclusively on second-language instruction.

Thomas A. Wilson is Principal of Catalpa Ltd., the School Visit organization. He is a Senior Research Associate in Education at Brown University. Since 1967, Wilson has studied how knowledge about practice can be garnered and used in the promotion of school reform. In 1996 he wrote *Reaching for a Better Standard:*

English School Inspection and the Dilemmas of American School Accountability, based on an intensive field-study of how English inspectors work as they come to know and make judgments about school performance. Since that time, he has been working to develop the School Visit as an effective tool in American public schools for school accountability and improvement.

Jon Snyder is currently Director of Teacher Education at the University of California, Santa Barbara and Senior Researcher with the National Commission on Teaching and America's Future. He is engaged in "doing" teacher education, studying teacher education, and policy development in teacher education.

Appendix: Draft Standards
for Professional Development Schools

September, 1997

Introduction

These draft standards for professional development schools were developed through a process of inquiry, reflection, and discussion involving representatives of the various constituencies of PDSs. Deliberations were supported by research and analysis of data assembled through a national survey of PDS sites, focus groups and interviews conducted in selected sites, and a comprehensive review of the literature.

Goal

Our goal was to develop institutional standards for PDSs. The unit is defined as the partnership as it resides within a P-12 school. Several considerations framed our work. The first is the formative nature of PDSs — they are in the process of being developed, and as such, they are vulnerable institutions. Over-prescription and mandating is likely to limit creative solutions to difficult problems. On the other hand, lack of definition can result in replication without rigor; the purpose and the potential of the PDS can be lost. Therefore, the PDS Standards Project sought to create standards that could achieve a delicate balance in serving two important functions:

- to identify the distinguishing characteristics of PDSs; and
- to support the development of quality PDSs.

Our second consideration was the unique position that PDSs occupy — at the juncture between teacher education and school reform. Professional development schools are an important part of the continuum that underlies professional teaching practice. As such, practices and programs in PDSs should be consistent with developing standards for new teachers (i.e., INTASC Standards) and for highly accomplished practice (i.e., National Board for Professional Teaching Standards). PDSs should model good practice associated with achieving high standards for student learning. They should be "standards-bearing institutions."

Our third consideration was to have the standards address what is unique and what is necessary in PDSs. PDSs are not intended simply to provide new settings for student teaching as we have known it. While many of the features of a PDS may be desirable in any clinical education setting, there are some core commitments which are specific to the PDS: (1) an environment which integrates adult and children's learning; (2) parity for university and school partners on all issues of practice and policy in the PDS; and (3) the simultaneous renewal of the school and the university. The work that goes on in a PDS is new work jointly done by university and school faculty. The focus is professional development and children's learning at all stages of development and may extend beyond teacher education to include the education of administrators and other educational personnel.

About the Draft Standards

Three important features of the standards should be noted. First, they are written to recognize the developmental nature of the institution. Second, they are organized around the critical attributes of the PDS, rather than around the main functions. And third, they recognize the importance of performance standards as well as standards that address resources or inputs, and process standards that address the support of a collaborative learning environment. Each of these features will be discussed briefly.

Stages of Development

The draft standards recognize three stages of PDS development: pre-threshold, threshold, and quality attainment.

I. Pre-Threshold

Many school/university partnerships that are centered on teacher education are in an important pre-threshold stage. They may not meet the critical Threshold Conditions but they are supporting the development of important relationships and trust among participants, which is necessary in order for the Threshold Conditions to be effective. We do not offer standards for this stage of development but there are some important observations that should be made, which may serve as guidance. At this pre-threshold stage individuals build relationships, mutual values and understandings, and early collaboration between school and university teachers takes shape. Memos of understanding may be transacted about shared expectations and activities in which partners may participate together. The pre-threshold stage characteristically lacks institutional commitment. One critical characteristic distinguishes potentially successful sites, even at this early pre-threshold stage. The partners recognize the need to integrate the four main functions of the PDS: preservice teacher preparation, staff development, research, and support of children's learning. Trying to address these functions as parallel pursuits is overwhelming in terms of human and financial costs, no matter what the magnitude of institutional commitment. At its core the PDS is about the integration of these functions. This integration creates new kinds of work for all participants who share the roles of teachers, learners, researchers, and teacher educators.

II. Threshold Stage

The Threshold Conditions include those characteristics that must be in place in order to provide the support or foundation for the PDS to develop those critical attributes which are identified in the next stage. Threshold Conditions focus mainly on the institutional commitments that support the development of the PDS. PDSs are high stakes partnerships because partnering institutions agree to share responsibility in areas where each formerly had independent control. Because they are high stakes, PDSs typically rely on relationships built prior to the partnership. Agreements, commitments, and working relationships between institutions that are established in the absence of prior collaboration may be weak. Also, because of the high stakes nature of the partnership, PDSs require broad community or organizational support. The commitment of the university, school district, and teachers union/association are

critical to attaining the resources and conditions that are associated with successful PDSs. These Threshold Conditions are:

1. an agreement which commits school, school district, union/professional association, and the university to the basic mission of a PDS;
2. a commitment by the partners to the critical attributes of a PDS;
3. a positive working relationship and a basis for trust between partners;
4. the achievement of quality standards by partner institutions as evidenced by regional, state, national, or other review; and
5. an institutional commitment of resources to the PDS from school and university.

III. Standards for Quality Review

Quality standards represent the essential attributes of a PDS and the evidence of their achievement in fulfilling the PDS mission. The Critical Attributes for which standards have been written are:

I. Learning Community
II. Collaboration
III. Accountability and Quality Assurance
IV. Organization, Roles, and Structure
V. Equity

Focus of the Quality Standards

The quality standards are framed in terms of critical attributes of a PDS. A standard is identified for each critical attribute. An examiner would find the standards to be met in a highly developed PDS. Several indicators are provided for each standard, all of which would be present in a highly developed site. Each indicator is accompanied by a set of examples — what might be seen or heard or found in a PDS site as evidence that the indicator is being addressed. In the future, these indicators will be further refined, based on tests at numerous sites. Vignettes developed at pilot sites will supplement examples, and provide scenarios of several ways in which a standard might be met.

The standards are written for the critical attributes and not for each of the four functions (teacher preparation, staff development, research, student learning) to stress the integration of these functions. Each critical attribute is relevant to each core function of the PDS. For example, as demonstrated in Critical Attribute II, collaboration between partners is expected and is characteristic of all aspects of preservice teacher education, staff development, identification and implementation of a research agenda, and diagnosing and meeting children's needs. Similarly, all four functions are supported by the learning community: quality assurance and accountability is expected with reference to teaching, learning, and learning to teach, and in the conduct and use of research; equity applies to all functions; and organization, roles and structures are designed to support the integration of these functions.

Finally, the standards address what are believed to be the necessary resources or inputs and processes that are associated with creating PDS settings and which are

believed to be necessary to support the desired outcomes. Performance standards and desired outcomes appropriate for university and school faculty, teacher candidates, and children are identified.

At this juncture there has been little attempt to associate specific indicators or examples of them with stages of development in a PDS beyond the Threshold Conditions. A continuum of development is embedded in the many examples given. At this point, however, no differentiation is made among them.

It is anticipated that these draft standards will be revised and refined through a process of piloting and assessment over the next several years. One of the purposes of the research and development will be to identify this continuum of PDS development.

Glossary

Professional Development School

Collaboration between schools, colleges or departments of education, P-12 schools, school districts, and the union/professional association. The partnering institutions share responsibility for (1) the clinical preparation of new teachers; (2) the continuing development of school and university faculty; (3) the support of children's learning; and (4) the support of research directed at the improvement of teaching and learning.

Intern

Preservice teacher candidate.

School Faculty

P-12 teacher in a PDS.

University Faculty

University teacher in a PDS.

Children

P-12 students in a PDS.

Internship

Position and responsibilities filled by preservice teacher candidate.

Educators

P-12 and university administrators and other education personnel.

PDS Participants

University and school faculty and other educators.

PDS Faculty

School and university teachers who work in the PDS

PDSs may also serve as settings for other stages of teacher development including:

Resident

First year teacher with provisional license in a PDS.

Residency

Induction year position and responsibilities filled by first year teacher with provisional license in a PDS.

Practicum Students

Teacher education students who are observing and participating in schools prior to their internship.

Threshold Condition 1

An agreement which commits school, school district, union/professional association, and university to the basic mission of a PDS: the preparation of new teachers, support of children's learning, continuing professional development, and practice based inquiry within a school setting.

Indicator 1

Each partner simultaneously demonstrates commitment to its unique institutional mission and its shared PDS mission.

Examples

- Participants recommit formally to the PDS each year.
- PDS directory (handbook) defines assumptions underlying PDS partnerships, including partners' commitments.
- Participants can articulate the PDS mission

Indicator 2

There is agreement among partners to shared decision-making in areas which directly and indirectly affect the mission of the PDS.

Examples

- Partners serve on each other's governance committees.
- PDS has formal communication links to the decision-making bodies at partner institutions.
- Partners are equitably represented in governance structure.

Indicator 3

PDS mission and mission of school and university cohere.

Examples

- University identifies PDS in its teacher education mission.
- School faculty are knowledgeable about the philosophy, goals, and expectations of the teacher preparation program.
- The larger school community respects and supports the work of PDS colleagues.

Threshold Condition 2

Commitment by the partners to the critical attributes of a PDS: There should be tangible commitment from each partner to (a) the support of a learning community for adults and children; (b) collaboration; (c) accountability and quality assurance; (d) the development of organization, roles, and structures that support these attributes; and (e) equity as it affects students and teachers.

Indicator 1

Partnership agreements acknowledge the five critical attributes of a PDS and commit partners to working toward achieving them.

Indicator 2

Partners have a plan designed to develop these attributes in their PDS.

Indicator 3

Partners demonstrate they have taken organizational, structural, and financial steps toward achieving these attributes.

Examples

- PDS can demonstrate its knowledge-generating function.
- PDS provides time for shared talk about problems of teaching and learning.
- PDS participants disseminate their knowedge to the larger education community.
- Participants play a role in each other's world.
- PDS participants share knowledge about good practice.
- Participants do work together, without one party leading and the other following.
- Partners make joint decisions.
- Partners jointly make "logistical" decisions (e.g., how many people should be on this committee?)
- Partners jointly construct teacher preparation goals.
- School faculty participate in designing field assignments.
- School faculty participate in formal evaluation of interns.
- University faculty are involved in curriculum change at school.
- PDS governance responsibilities are shared.
- Formal PDS council, including participants from university and school site, is the decision-making structure.
- PDS participants identify with their institution and with the PDS.

Indicator 4

Shared language is heard among participants.

Threshold Condition 3

Positive working relationship and a basis for trust between partners.

Indicator 1

University participants share the school's commitment to its community.

Examples

- School faculty seek out university colleagues to share work.
- Real and sustained university presence at the school.
- Staff participation grows over time.

Indicator 2

Professional relationships reflect trust.

Examples

- Real and sustained university presence at the school.
- School faculty commit to long term PDS involvement.
- Partners serve as each other's critical friends and confidants.
- School faculty seek out university colleagues to share work.
- PDS faculty entrust children to the interns.
- Participants include teacher union representatives in early and ongoing conversations.
- Staff participation grows over time.

Indicator 3

PDS participants demonstrate a commitment to learning how to work together.

Examples

- Participants include teacher union representatives in early and ongoing conversations.
- Participants engage in risk-taking because there is a "no-fault" culture.
- Partners respect each other's beliefs.

Threshold Condition 4

Achievement of quality standards by partner institutions as evidenced by regional, state, national or other review.

Indicator 1

Partner selection process reflects personal knowledge and history.

Indicator 2

Partner selection process is jointly developed.

Indicator 3

Selection criteria are public and process is open.

Indicator 4

Participation criteria include national, state, or regional accreditation for P-12 school.

Indicator 5

Partner school of education is NCATE-accredited or a candidate for NCATE accreditation.

Threshold Condition 5

Institutional commitment of resources to the PDS from school and university.

Indicator 1

Resources are clustered to create new roles, structures, and opportunities to learn.

Examples

- University faculty spend no less than one day per week at PDS.
- PDS has a critical mass of school and university faculty and educators committed to mission.
- School faculty have time to work outside their classrooms.
- Commitments to PDS work are long term.
- Partners spend regular time together.
- Interns are clustered in school site.
- Residents are clustered in school sites.

Indicator 2

Resources are blended to achieve integration of PDS functions and integration of PDS into partner institutions.

Examples

- Interns, school faculty, and university faculty all are teachers and learners.
- School district and university funds are pooled to support integration of PDS functions.
- PDS site relationships are integrated into the school of education clinical program.
- PDS work broadly informs teacher education curriculum.
- PDS has a role in school district (e.g., teacher development, research dissemination).

Indicator 3

Institutional leaders support the PDS mission.

Examples

- PDS principles correlate with principal's long-term agenda.
- Principal spends time in PDS work.
- Administrator juggles PDS-related resources with school-wide needs.
- University dean regularly meets with school superintendent.
- PDS has a site-based leader.
- School-based leaders seek parent and community participation in PDS work.
- School-based leaders regularly communicate PDS agenda to district, staff, and community.
- PDS has clear support from senior administrators at partner institutions.
- PDS decision makers reach out to the larger school and university communities.
- Principal's work in PDS is valued and supported by district administrators.

- Principal hires PDS graduates.

Indicator 4

Partners provide support for PDS development.

Examples

- Partners provide "in-kind" resources.
- Partners provide resources to the whole PDS rather than allocate them to individual teachers.
- Professional development resources are allocated to the PDS.
- Participants have time to disseminate their work.
- Space for PDS work is available at school site.
- PDS work is valued by university tenure committees.

Indicator 5

School system, university, and teachers' union/association demonstrate openness to change.

Examples

- New roles for school/university faculty are created.
- Financial commitments are articulated.
- PDS work is full-time work for some participants.
- District and union waive rules in response to PDS needs.
- Available PDS incentives are shared throughout the school.
- PDS mission and goals are embedded in the school improvement plan.
- Non-participants agree not to obstruct PDS.

Critical Attribute I: Learning Community

Standard: The PDS is a learning-centered community characterized by norms and practices which support adult and children's learning. Indications of a learning-centered community include: public teaching practice; integration of intern and teacher learning with school instructional program; collegiality; inquiry; and dissemination of new knowledge. Opportunities to learn are equitably supported.

Indicator 1

There is an inquiry orientation toward teaching and learning.

Examples

- Interns challenge teachers to reflect on their practice.
- Evidence of serious talk around teaching and learning.
- Faculty in the PDS help novices "figure things out".
- School faculty are engaged in the study and improvement of their own practice.
- PDS participants engage in community development work.
- PDS research and practitioner knowledge are valued.

- Teaching-learning data are collected systematically and used to inform and change practice.
- Adults engage in "kid-watching".
- PDS participants disseminate new knowledge to others.
- PDS participants engage in community development work.
- Participants interact with other PDS sites.
- Children's work is the focus of PDS participants' discourse.

Indicator 2

The PDS provides the opportunity for interns, residents, school and university faculty, and educators to develop their knowledge, skills, and understandings related to working with diverse students.

Examples

- PDS supports development of diverse learners .
- Interns and residents work with children with diverse learning needs.
- Interns work in multiple classrooms.
- PDS participants know and know about children's families.
- Special needs children are valued in classrooms.
- PDS participants share responsibility and accountability for all children.
- Adults and children engage in risk-taking learning.
- Learning-centered practices are reflected in classrooms throughout the PDS.
- PDS faculty visit each other's classrooms.
- New professional development opportunities are created for PDS participants.
- Resident support is substantive and ongoing.

Indicator 3

Research produces changes that enhance student learning and improve the organizational environment.

Example

- PDS participants can talk about what they have learned in practice and how it has affected what they do and what children learn.

Indicator 4

The learning of interns or resident teachers is integrated into the school program and into teaching practice.

Examples

- Interns and residents have position descriptions, responsibilities, and function as part of the instructional team.
- Interns and residents participate in schoolwide decision-making, and serve on school task forces and committees.
- Learning and practice are interwoven.
- Schoolwide investment in preparation and growth of interns and residents.

- Participants engage in public practice.
- Adults and children are self-assessors.
- University-based courses use performance-based assessments.
- Interns can identify connections between their school site work and their university course work.

Indicator 5

Teacher learning and professional development are integrated into practice.

Examples

- Teaching is public practice.
- Teachers frequently observe in other classrooms and discuss questions of student learning, curriculum, and teaching practice.
- Time is allocated for teachers to visit other classrooms, confer with colleagues, present and discuss student problems with colleagues.

Indicator 6

Teaching and learning are collegial.

Example

- There is a whole school orientation — teachers share problems and solutions.

Indicator 7

Knowledge generated in the PDS is disseminated within the school and university and to other schools in the district.

Examples

- There is a forum within the school for disseminating PDS-generated knowledge.
- There are connections between the PDS and staff development districtwide.

Critical Attribute II: Collaboration

Standard: A PDS is characterized by joint work between and among school and university faculty directed at implementing the mission. Responsibility for learning is shared; research is jointly defined and implemented; all participants share expertise in the interests of children's and adults' learning.

Indicator 1

Everyone in the PDS shares responsibility for the preparation of new teachers.

Examples

- University and school faculty jointly plan and implement curriculum for interns.
- PDS faculty care equally about interns and children.

- PDS members participate in cross-institutional hiring decisions.
- Participants jointly develop criteria for PDS school faculty.

Indicator 2

PDS participants share expertise in the interests of children's learning.

Examples

- University and school faculty meet to discuss learning problems, instructional issues, and school-wide issues.
- Interns' advice and suggestions are incorporated into structures and procedures.
- Participants move across institutional boundaries to engage in collaborative activities.
- Participants can demonstrate ways in which they believe and practice a common [shared] theory of learning.
- Participants reach out to parents directly.
- Parents support PDS work.
- Parents participate in education discussion groups in the PDS.
- Parents want teachers who have been PDS-prepared.

Indicator 3

The program for improvement-oriented inquiry is determined on the basis of jointly defined needs.

Examples

- University and school faculty decide together what research focus they will take and plan and implement research projects together.
- Participants co-investigate practice through classroom-based research.
- Participants engage in joint work on problems of practice.

Indicator 4

PDS partners share responsibility for selection and evaluation of PDS faculty, interns, and residents.

Indicator 5

Resources are clustered to create new roles, structures, and opportunities to learn.

Examples

- (See Threshold Condition 5, Indicator 1 and examples.)

Indicator 6

Resources are blended to achieve integration of PDS functions into partner institutions.

Examples

- (See Threshold Condition 5, Indicator 2 and examples.)

Critical Attribute III: Accountability & Quality Assurance

Standard: The PDS is accountable to the public and to the profession for upholding professional standards for teaching and learning and for preparing new teachers in accordance with these standards.

Indicator 1

The PDS has jointly defined entrance qualifications for interns.

Examples

- Interns must be able to demonstrate mastery of their content area.
- Interns must be able to demonstrate professional knowledge including child development, pedagogical knowledge, and foundational knowledge and/or be enrolled in appropriate professional education courses concurrent with their internship.

Indicator 2

Upon completion of an internship, candidates must be able to demonstrate the skills, knowledge, and dispositions of beginning teachers as defined by appropriate professional and state standards for beginning practice.

Examples

- Candidates meet INTASC standards.

Indicator 3

Qualifications for PDS faculty include the demonstration of skills, knowledge, and abilities of highly accomplished teachers.

Examples

- PDS faculty meet NBPTS standards.
- PDS faculty standards are consistent with national standards for teaching subject matter.

Indicator 4

PDS faculty are selected and prepared to mentor and supervise intern and resident teachers.

Examples

- There are known criteria for mentoring and supervising preservice teachers.
- Workshops and seminars help PDS participants develop the necessary knowledge and skills.
- Selection criteria include the ability to articulate practice.

Indicator 5

Teaching practices of PDS faculty are monitored regularly.

Examples

- PDS faculty prepare and present portfolios of their teaching practice.
- PDS faculty are observed teaching on a regular basis.
- Selection and evaluation of PDS faculty are done jointly by PDS partners.

Indicator 6

Children can demonstrate what they know and are able to do in appropriately diverse ways to meet national or state curricula standards.

Examples

- Multiple and diverse assessment approaches are used to measure children's learning.

Indicator 7

The PDS is accountable to the public.

Examples

- Regular communication between PDS participants and the broader community about what they're doing and why they're doing it.
- Meaningful presentations are made to the public about PDS activities.
- Criteria-driven curriculum decisions made.
- Children's progress is regularly monitored and reported to parents.
- Parents want their children in the PDS.
- Selection criteria and process of participation as a PDS site are public.
- PDS participants use standards to measure their growth.

Critical Attribute IV: Organization, Roles, and Structures

Standard: The PDS uses processes and allocates resources and time to systematize the continuous improvement of learning to teach, teaching, learning, and organizational life.

Indicator 1

School and university educators understand the mission of the institution and their individual and shared roles and responsibilities.

Examples

- Participants can talk about what they do and the mission of the PDS with consistency, coherence, and comprehension.

Indicator 2

There are incentives for school and university educators to work in responsible ways toward the improvement of practice.

Examples

- The university recognizes PDS work in tenure and promotion decisions.

- PDS faculty have appropriate preparation for new roles.
- School faculty expertise and time are appropriately compensated.

Indicator 3

Personnel evaluation of PDS school and university educators reflects the mission of the PDS.

Examples

- Clinical teacher education is acknowledged as part of the PDS faculty's responsibility in both university and school.
- Multiple teacher evaluation measures are used.
- Teacher evaluation processes embed teachers' own definition of what they need to learn.

Indicator 4

Structures and resources promote trust and acceptance of responsibility.

Examples

- Schedules for school and university faculty reflect the real work they are doing.
- Funds are available to support PDS research.
- University forums provide opportunities for disseminating PDS research.
- PDS participants receive salary differentials.

Indicator 5

Daily rituals and procedures promote feelings of community.

Example

- Allocation of parking spaces, mailboxes, and working space for interns, residents, and school and university faculty on campus and at school site reflect their collaboration and integration into school program.

Indicator 6

There are effective strategies for inducting interns into professional practice.

Examples

- Interns work with more than one school faculty member and have opportunities to observe and discuss professional issues with many.
- Interns are members of instructional teams and participate in all professional decisions.
- Interns have school-wide roles and responsibilities as well as classroom instructional roles.
- Interns learn to work with parents and community members in support of student learning.

Indicator 7

There are practices that systematize the continuous improvement of learning to teach, teaching, learning, and organization life.

Example

- The PDS evaluates effectiveness with respect to new teacher learning, children's learning, and continuous professional development of school and university educators and uses that information to make decisions.

Indicator 8

Sufficient time is allocated for PDS work and teacher learning.

Examples

- School and university faculty have reduced teaching loads to reflect time needed to work with interns.
- The preservice teaching is of sufficient length to effectively provide for the developmental needs of interns, to permit a broad range of experiences, and to allow for the integration of preservice teacher learning and practice.

Indicator 9

Resources are blended in order to support the new work of a PDS.

Example

- District and university pool financial resources for staff development.

Indicator 10

Human resources are clustered in a PDS in order to support the complex mission.

Examples

- Interns and/or residents are placed in PDS in cohorts.
- University faculty have teaching roles in the PDS.
- School faculty have teaching roles in university.
- Graduate students are in PDS to implement research with the school faculty.

Critical Attribute V: Equity

Standard: A PDS is characterized by norms and practices which support equity and learning by all students and adults.

Indicator 1

The inquiry agenda includes issues of equity.

Indicator 2

School and university curricula reflect diversity and are non-discriminatory.

Indicator 3

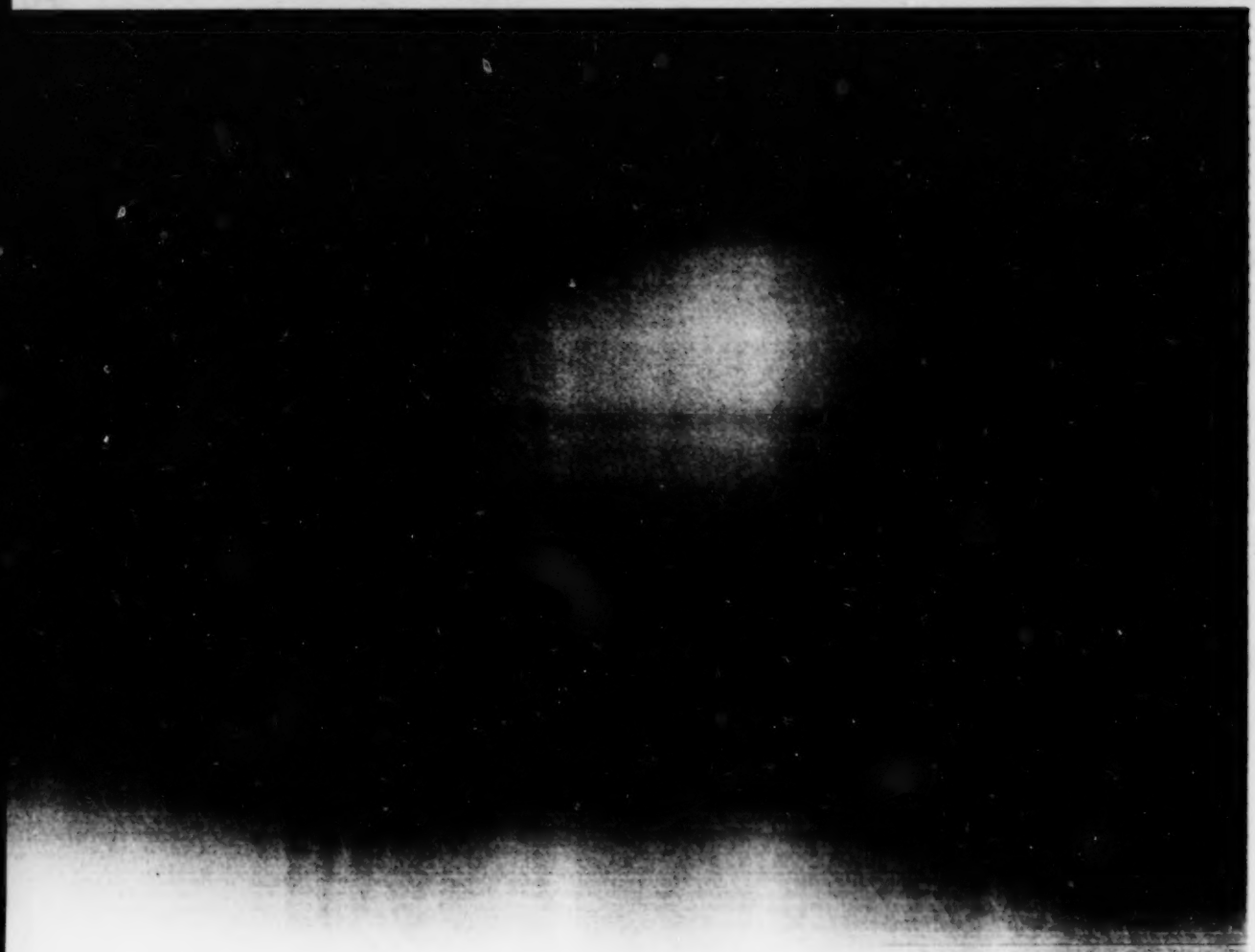
Interns work with children with diverse needs.

Example

- See Critical Attribute I: Indicator 2.

Indicator 4

School and university faculty engage families and communities in support of student learning.



BEST COPY AVAILABLE

National Council for Accreditation of Teacher Education
2010 Massachusetts Avenue, N.W., Suite 500
Washington, D.C. 20036-1023
(202) 466-7496
fax: (202) 296-6620
email: ncate@ncate.org
website: www.ncate.org